

From qrp-admin@Think.COM Mon Feb 28 23:11:48 1994
Date: Mon, 28 Feb 94 20:11:26 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: .gif files

i picked up the three .gif files from think.com. i get only partial
photos when displayed.

anyone else see this behavior?

dit dit
Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Tue Mar 1 07:11:18 1994
Date: Tue, 1 Mar 1994 07:10:40 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: .gif files

>
> i picked up the three .gif files from think.com. i get only partial
> photos when displayed.
>
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>
> dit dit
> Chuck Adams K5FO CP-60
> adams@sgi.com
>

Even though N2VTK is a hop skip and a jump away, I actually downloaded
the .gif files off of think.com, and they worked fine. I don't know what
could be going on there.

73 Brad WB8YGG

From qrp-admin@Think.COM Tue Feb 22 09:34:08 1994
Date: Tue, 22 Feb 94 07:35:02 -0700
From: tjf@beta.lanl.gov (Tom J Farish)
Subject: 30mW from New Orleans!

Had a blast with my MFJ9030 this weekend. I haven't used it much since
I bought it...worked mostly on 20m daytime. Anyway, last night, I was

tooling around 30m around sunset and heard a strong signal from KB5PX. I figured he was a local or maybe from Texas (I live in northern New Mexico). I fired off a call running 1 watt or so, and he came right back! I gave him a 569 and he gave me 509! He went to 1 watt and was still loud, so he went to 30mW! There was some QSB, but I got 90% and was able to fill in the rest! This is the first contact I've had into Louisiana on 30m ever!

I'm going to do more on 30m!

BTW the MFJ9030 drifts a lot more than my 9020 does. The 9030 is newer (has the quieter relay and better audio), but the 9020 seems much less prone to drift. On the QSO above, I had to adjust the dial an estimated 2 Khz over the 10 minutes we worked. Maybe it was just colder in my shack that day, but I almost never have to adjust the 9020 during a QSO!

Tom
KJ5LT

From qrp-admin@Think.COM Fri Feb 25 23:56:35 1994
Date: Fri, 25 Feb 1994 20:49:18 -0800
From: ROHRWERK@holonet.net
Subject: 30mW from New Orleans!

On 02-22-94, tjf@beta.lanl.gov wrote to qrp@Think.COM:

>-----
I gave him a 569 and he gave me 509!
>-----

Sounds like the report I got from somebody last night on 80 meters: 119! (1 in the first digit, according to the back of my ARRL logbook, is defined as "unreadable!" Yet he heard me and we had more than a minimal QSO!)

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Thu Mar 3 21:06:08 1994
From: mvjf@mvubr.att.com
Date: Thu, 3 Mar 94 20:54 EST
Subject: 72

If I remember correctly;

A few years ago a consortium of QRP clubs under the World QRP Federation (very popular in EU,) initiated in this country by Gus, G8PG (president of WQF), and th G-QRP, OK-QRP, AGCW-QRP, Benelux-QRP, QRP-ARCI and MI-QRP clubs voted unanimously to accept "72" as meaning "Good QRPing".

In the USA, the Vice President of QRP-ARCI is the appointed representative of WQF but little has been done here for the last 8 years, that I know of.

Maybe now, with the Internet connection to EU, someone would explore the possibility of active participation by the USA, in the World QRP Federation.

History in the making - And you have the opportunity !

Any candidates from the Internet QRP Club IQRP ?
Has an intelligent ring to itIQRP Club.....

(Dick, G0BPS - What is the WQF activity level in GB ?)

PS

The QRP Club of New England (QRP-NE) seized upon "72" as the name of it's fledgling club newsletter. Pretty smart eh ?

72 W1FMR

From qrp-admin@Think.COM Mon Feb 21 19:38:50 1994
Date: Mon, 21 Feb 94 19:29:33 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: 73

I have unscribed from the qrp mail list and wanted to say good-bye and wish you all the best.

73

Ed W1AAZ

From qrp-admin@Think.COM Wed Feb 23 10:26:22 1994
From: bwhite@dsd.camb.inmet.com (Bill White)
Subject: A kit availability question.
Date: Wed, 23 Feb 1994 10:26:08 -0500 (EST)

I have a friend who does not have net access who is looking

for a kit. He wants a QRP rig which he can put on one of several bands, say 80 or 40 or 30 or 20, but not bandswitched, and which does SSB. Is there any such kind of beast?

Peace,
Bill White, N10SA
<bwhite@world.std.com>

From qrp-admin@Think.COM Fri Feb 25 23:59:35 1994
Date: Fri, 25 Feb 1994 20:49:12 -0800
From: ROHRWERK@holonet.net
Subject: A question about operatin

On 02-22-94, sct@po.cwru.edu wrote to qrp@Think.COM:

>-----

A beginner's question: How does one operate with a separate transmitter and receiver? What's the trick to making sure one is listening and transmitting on the same frequency (or close enough that it doesn't matter)?

I suppose one could calibrate one's dials carefully and hope the two match (despite drift), or one could use a limiting network for RF-derived sidetone in the receiver. Is there some other trick out there?

Thanks for the help.

Stephen

>-----

Boy, do I feel like an old-timer being able to answer this (and I'm only 41!)

Most rigs designed to operate "separate" have a "spot" function that just keys the VFO and/or driver stages so you can hear your carrier frequency in the receiver. Then you adjust the transmit VFO for the SAME PITCH as your received signal (on cw, at least). (Common mistake: setting the VFO for zero beat in the receiver).

See the standard transmitter circuits in ARRL's QRP Classics, for example, to see how it's done.

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Tue Feb 22 08:23:32 1994
From: Stephen Trier <sct@po.cwru.edu>
Date: 22 Feb 1994 13:23:10 GMT
Subject: A question about operating technique

A beginner's question: How does one operate with a separate transmitter and receiver? What's the trick to making sure one is listening and transmitting on the same frequency (or close enough that it doesn't matter)?

I suppose one could calibrate one's dials carefully and hope the two match (despite drift), or one could use a limiting network for RF-derived sidetone in the receiver. Is there some other trick out there?

Thanks for the help.

Stephen

--

Stephen Trier "Socrates was a famous Greek teacher who went
sct@po.cwru.edu around giving people advice. They killed him."
KB8PWA - Anonymous, quoted by Richard Lederer

From qrp-admin@Think.COM Tue Feb 22 12:54:46 1994
Date: 22 Feb 1994 12:53:06 -0500 (EST)
From: "D A Coleman (ext. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: Re: A question about operating technique

G A, om

There's no substitute for a low-level output signal's being made available from your transmitter so that you can listen to that and align your transmit frequency with that of the station you want to work. And the alignment is a matter of ear. You may need a little practice in the use of this method before you feel you can trust it, but it's the only reliable method.

73

Don Coleman, W1V0Q

From qrp-admin@Think.COM Thu Feb 24 12:09:19 1994
Date: 24 Feb 1994 11:50:31 -0500 (EST)
From: "D A Coleman (ext. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: Re: A question about operating technique

G M

You're quite right: many communications-equipment designs are negligent as far as really effective transceiving is concerned. Actually, if you do a bit of fiddling, you may very well find that you can make do with a little capacitive coupling that's just inherent somewhere in your transmitter and receiver circuitry. I've known hams who have used phasing circuits and have been able--believe it or not--to hear other signals right through their own.

73

Don Coleman, W1V0Q

Funny thing you should mention Socrates; I'm a philosophy prof. As the old boy might have said if he'd lived in our day, "I'd sooner Lipton. -- A quote that should have been anonymous!

D. C.

From qrp-admin@Think.COM Tue Mar 1 12:39:45 1994
Date: 02 Mar 1994 01:41:00 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Antenna feeds, coax or twin.

Hi,

I have another antenna question. Which should I use to feed my 20 meter dipole and what are the pro/cons of each, the coax or twin leads? What impedance should I use? 50, 75 or 300 ohm? Is a balun necessary for ideal performance? What about RFI? I know its a mouthful but I am learning with every reply :)

73 de 9V Daniel

From qrp-admin@Think.COM Thu Mar 3 13:24:02 1994
Date: Thu, 3 Mar 94 10:30:04 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.hf.intel.com>
Subject: Re: Antenna feeds, coax or twin.

Daniel,

Antennas and all their variations are like Fords and Chevys, IBMs and Macintoshes; everyone seems to have a preference and can argue passionately about their choice. And rightly so.

Here's the punchline: Dipole antennas of virtually every configuration and combination of feedlines have been successfully

used for decades, but some seem to work better than others in general.

That said, here is my own biased opinion. The feedline you use depends on your antenna constraints.

50 OHM COAX

PROS: Readily available in most locales, reasonably unaffected by nearby metallic objects like gutters, tower legs, or metal window screens, offers a good match to a centerfed horizontal dipole.

CONS: Losses and costs. The lighter RG-58 style coax exhibits higher losses than the heavier RG-8 or twinlead, so long runs should be avoided. The good stuff is expensive, too. The unbalanced nature of coax (the electromagnetic fields produced by the two conductors are not symmetrical, and thus do not cancel unwanted radiation from one another) can distort the antenna radiation pattern. Some operators use a balun to clean things up, but that introduces yet more cost, loss and weight. Also, soldering the connectors on coaxes has been a character-building exercise among hams for generations.

75 OHM COAX

PROS: See above. Generally, the 75 ohm impedance is close enough for a reasonable match. 75 ohm stuff is best saved for vertical antennas which present a feedpoint impedance closer to 75 ohms. However, if it's all you have, by all means use it.

CONS: See 50 ohm, above.

TWINLEAD (ANY IMPEDANCE)

PROS: Low loss, lightweight, inexpensive, balanced feedline (no balun needed).

CONS: Requires an impedance matching network -- an antenna tuner at the radio end -- to present a 50 ohm load to our delicate solid state radios. De-tuned by nearby metal objects.

If you are planning to backpack your QRP station into the boonies, weight, size and complexity (read "reliability") will be paramount in your mind. If you are starting your back yard antenna farm with a short run of feedline between your radio and your 1:1 SWR antenna, either coax or twinlead will do fine. If the feedline length will be over 50' - 100' in free space,

feedline will deliver more RF to your antenna despite the impedance mismatch at the feedpoint. The list of concerns and combinations is endless.

My own portable QRP 20m dipole will be trimmed for 1:1 and fed with a 30'-40' length of RG-58 without a balun. As you can see, I prefer cheap, light and simple.

MFJ also offers a folded dipole 20m antenna with a 30' twinlead matching stub that terminates in a coax connector for your own 50 ohm extension, if needed. The antenna sells for about \$35. I've never used it, but it seems like a good tradeoff between simplicity, weight, low loss and balanced feedline. If you decide on this route, let me know how it works for you.

So, Daniel, there are lots of right answers for your application. You get to pick the one that is best for your constraints.

Good luck!

-- Mike, WB4ZKA

----- Reply Separator -----
Subject: Antenna feeds, coax or twin.
Author: qrp-admin@Think.COM at Internet_Gateway
Date: 3/1/94 10:17 AM

Hi,

I have another antenna question. Which should I use to feed my 20 meter dipole and what are the pro/cons of each, the coax or twin leads? What impedance should I use? 50, 75 or 300 ohm? Is a balun necessary for ideal performance? What about RFI? I know its a mouthful but I am learning with every reply :)

73 de 9V Daniel

From qrp-admin@Think.COM Thu Mar 3 15:04:08 1994
Date: Thu, 3 Mar 1994 11:21:59 -0800
From: ames@force.DECNET.LOCKHEED.COM
Subject: Re: Antenna feeds, coax or twin.

In following the discussion, I've been dealing with most of these issues for the past year due to a change in QTH. Although I usually operate low power (100w), I just bought an FT-7 and will soon do more QRP operating. The biggest problem with RG-58 is that it soaks up water and my SWR goes from 1:1 to 5:1, and doesn't recover even after it dries

out. Others have suggested cutting it at the low point in the feed to drain, but I have switched over to RG-8X with non-contaminating jacket as it is more water resistant and is cheap in bulk from the "WIREMAN".

If you feed a dipole with coax, clearly the impedance mismatch is an issue. I suspect 50 ohms is used because it is a compromise between a dipole (72 ohms) and a vertical (36 ohms). But for QRP applications, if the antenna is resonant most of the energy will eventually be emitted there. The power loss of the reflected signal into the transmitter is low enough that damage should not be a concern. Emission on the feedline should not occur on a balanced line. Emission on a coax can only occur if there is a current flowing on the shield, which must occur if a balun is not used at the antenna. But stray RF should not be a problem for QRP, so that is optional in a practical sense.

I use three different antennas for 20 meters. First is an AP8A vertical, with the shield grounded with a six foot ground rod (radio shack) at the antenna. Very good for low angle propagation, and used a great deal to reach the JA stations. Of course, QRM is often a problem.

Then there is my folded dipole from 300 ohm twinlead, and a twinlead feed. That goes into a "homebrew" (ie design and fab) balun at the rig, which gets it down to 50 ohms right at the rig. Propagation is N-S, and this is the only antenna which has gotten me into any EU contacts. It is my favorite antenna, and ...

Last is a half-square antenna which is feed with 50 ohms coax. I bought this from ANTENNAS WEST and it is a single wire antenna that looks like the bottom half of an "H". The vertical are 1/4 wave and the horizontal is 1/2 half wave. and is supposed to work like a phased vertical array (but without a ground plane.) I have this working in an E-W propagation. Like the folded dipole it lies flat on the roof, but the vertical drape over the side. It seems to work well and have worked most of the east coast states with it (hum, except perhaps South Carolina).

The only place I use RG-59 is to feed my 160 meter 1/4 wave Marconi made with twinlead, which has a 100 ohm impedance at the antenna. The performance is poor but only because the antenna is nailed to a fence at four feet. I did reach Colorado in the 160 m contest, but usually nobody hears me.

Well, both my 40 meter dipole and 80 meter dipole use commercial baluns and are feed with RG-58 and have to go thru the tuner since the coax has water damage.

So, here are some data points and my observations. My next antenna that I hope to use is a vertical using weather balloons to pull them vertical. I have a copy of a patent which is supposed to be the "first" radio, issued in the 1870's by a man named Loomis. Real QRP!!!! He keyed a vertical

and picked up the signal on another vertical. ZERO watts input.

73, alan N2ALE/6

From qrp-admin@Think.COM Thu Mar 3 17:32:05 1994
Date: Thu, 3 Mar 94 14:38:01 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.hf.intel.com>
Subject: RE: Antenna impedances (the correction)

Text item: Text_1

Daniel,

Woops! I made a mistake in my comments on dipoles and feedlines. I should have said that the ideal dipole exhibits about 70-75 ohms while an ideal vertical exhibits 50 ohms. So swap the comments under "50 OHM COAX" with those under "75 OHM COAX".

Thanks to Mont, km6wt and Bob, AC4QO for thoughtfully getting me back on mental course.

Sorry for the confusion.

Regards,

-- Mike, WB4ZKA

From qrp-admin@Think.COM Wed Feb 23 23:36:09 1994
Date: 24 Feb 1994 12:33:11 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Antenna orientation

Hi again,

I was just wondering, for QRP work, is it better to have the dipole oriented east-west or north-south or something else? I figure if I use north-south, then I can take advantage of gray-line propagation but will QRP signals be able to make the hops required? Or if I use east-west, I might get some nice single hops?

Should I use a beam or stick to my dipole? I am in 9V land so there are hams towards jo, bv, vk, dl land to the east of me which I usually can receive but no QSO except for BV which must have been a single or at the most double hop from here. Any ideas?

73 de 9V Daniel

From qrp-admin@Think.COM Tue Feb 22 11:51:20 1994
Date: Tue, 22 Feb 94 13:51:26 GMT
From: jkearman@arrl.org (Jim Kearman)
Subject: Argosy II For Sale

Posted for Rich Arland, K7YHA, who doesn't have net access.
I can't answer any questions about this equipment, so please
don't ask.

Ten Tec Argosy II (Model 525D)
80-10 meters, SSB/CW, 5/50 watts output
Coverage includes 30 meters, but not 12 or 17 meters
The entire 10-meter band is covered

Options included are:
2.4 kHz 8-pole crystal filter
500 Hz 8-pole crystal filter
audio filter (internal)
noise blanker
matching ac supply (radio operates from nominal 13.6 Vdc)
2 circuit breakers

The front panel and knobs were recently replaced. The cabinet
has one, pencil-point sized "ding," and is otherwise perfect.

Price, including all items mentioned above, plus all manuals,
is \$550 + shipping.

Contact Rich Arland at home, 9 PM - midnite Eastern time.
717-825-5395

From qrp-admin@Think.COM Sun Feb 20 22:00:43 1994
Date: 21 Feb 1994 10:57:36 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: ARK 20/30/40 Kit

I have seen an ad for the ARK 20/30/40 QRP Xcvr kit in the CQ magazine. Wonder if
anyone here has built or seen the thing in performance and could comment on it?

As an aside. I was wondering if final stages of QRP Tx amps could easily be
modified to give a tad more power for those hard to heard QSO's? I am not too
clear
as to the RF transistor specs so if anyone could enlighten me about the RF Amps I
would be most pleased and thankful.

73

de Daniel (9V)

From qrp-admin@Think.COM Fri Feb 25 14:31:07 1994
Date: 25 Feb 1994 23:47:48 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: ARK 20/30/40 Users

Hi there,

I just wanted to check if there are among this QRP net, any other users of the ARK 20/30/40 Tranceiver and so can give me a second opinion (other than Jeff Gold's review).

I would also like to know if there is any consensus as to which kit is the best performer around here?

73 de 9V Daniel

From qrp-admin@Think.COM Wed Feb 23 22:42:42 1994
Date: 24 Feb 1994 02:18:20 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: ARK 20/30/40 users here?

Hiya,

It seems to me that the only one here with an Ark txrx is Jeff Gold who wrote a review on it. Is there a reason why no one else seems to have this kit? Other than the price, I hear it is supposed to be a good performer? any takers?

73 de 9V Daniel

From qrp-admin@Think.COM Tue Feb 22 02:09:44 1994
Date: 22 Feb 1994 15:06:34 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: ARK 20/30/40 vs. other kits?

Hi,

I was just wondering if anyone has made a comparison of the performance of the various kits side by side and gave them a rating so that kit builders can have an idea of how far their kit is up on the scale.

I am especially interested to know about how the ARK 20/30/40 kit by S & S Engineering performs against the more popular kits such as NorCal, Spirit, Spider, Radiokit, Ramsey products. Both in terms of quality but more

so in terms of actual performance on air and at pulling in QSOs? Does anyone here have the relevant information or have the resources to make such a comparison.

It is hard to compare based of specs alone because the specs are often derived from different tests and there is not exactly a controlled test for the specs. As such merely comparig specs does not tell the whole story.

I also wonder if the reason for the lack of threads on the Ark is due to the fact that I am too late and have missed the boat, or that it is too expensive for most people. I am most interested to hear from people who have built and/or used the ARK 20/30/40. Mods for the said kit are also very welcome.

73 de 9V Daniel

From qrp-admin@Think.COM Sat Feb 26 14:42:25 1994
Date: Sat, 26 Feb 94 14:44:13 EST
From: hysell@Kodak.COM (John D. Hysell)
Subject: BARK project photos

Last Fall, the Brockport Amateur Radio Klub began meeting a second night each month to promote the construction of HAM related projects. Since then, a remarkable amount of hardware has been constructed. On Thursday, Feb. 24, we met to pool our projects in one large pile for a group photo. Approx. 90% of the participants were able to attend along with their 'wares.

I have FTPd 3 of the phots in GIF format to think.com in the /incoming directory. They are all a bit over 200 KBytes in size:
bark.gif (group photo in front of the pile of projects)
goodies.gif (close up of the pile itself - note my NORCAL 40 up front 8-)
wb8ygg.gif (close up of Brad's contribution to the pile)

These are 256 color GIF files. You may need to convert them to another format if your system does not support 256 colors (or more). I will be happy to assist anyone with conversions as required...

By the way, my NORCAL went together in under 8 hours. I loaned it to Brad this week, and he reported a QSO in New Hampshire where he received a 599. Not bad for 1.25 watts from Rochester NY (actually, Brad is about 10 miles or so west of Rochester...)

73 DE N2VTK
-John
hysell@kodak.com

From qrp-admin@Think.COM Wed Mar 2 10:57:18 1994
Date: Wed, 2 Mar 1994 10:54:22 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: bark.gif

In case anybody wants to know who's ugly mug is who's .. in the bark.gif picture on think.com...

Brockport Amateur Radio Klub , Brockport N.Y.

from left to right

Jim N2VNO, Tim KB2PBR, Larry Our Vice President WA2ROW
Virgil N2IXE, Dave N2PSH, Chris WB2DYJ, Paul our Presidnet K2DB
Dick N2TOY, Bill KB2BLS, Gary N2JGU, Brad Secretary WB8YGG, Jeff N2SZE.

Digital Photo Thanks to John N2VTK, who should have been in this picture too. Picture was taken February 24, 1994 at our monthly meeting.

Many other of our club members are not in this photo, but the pile of equipment is mainly due to those in the photo and N2VTK

73 Brad WB8YGG

From qrp-admin@Think.COM Tue Feb 22 11:27:26 1994
Date: Tue, 22 Feb 1994 08:15:10 -0800
From: cleveland@gvg47.gvg.tek.com (Grover Cleveland)
Subject: Bird slugs question

What is the lowest power hf slug that Bird makes and what is its model number?

73

Grover, WT6P

From qrp-admin@Think.COM Tue Mar 1 12:49:59 1994
Date: 02 Mar 1994 01:48:35 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Callsign servers.

Hi,

Are there any callsign servers out there that hold references for non-American (eg. Japan etc) callsigns?

73 de 9V Daniel

From qrp-admin@Think.COM Fri Feb 25 10:38:06 1994
Date: Fri, 25 Feb 94 07:36:27 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Chuck's Newsletter

Gang, I heartedly endorse Chuck's efforts to produce another newsletter. It will fill a void in those 4 months. Now, all we have to do is get the info to him. I agree that we don't want to print the same info in both journals. Chuck and I will get together and work that out. We are close friends, talk on the landline weekly, and daily via email. He is providing a service, and I told him how to produce 4 issues per year for \$5. It is easy if you know the secrets. I am member #2, and very honored to have it. Send Chuck your \$5. You won't regret it. Usual disclaimers don't apply. I am a member of North Texas QRP Club but I don't have any monetary interest other than I paid the \$5.

72, Doug

From qrp-admin@Think.COM Thu Mar 3 15:41:14 1994
Date: Thu, 3 Mar 94 12:26:17 PST
From: GroverC@gvgadg.gvg.tek.com (Grover Cleveland)
Subject: Clarification - Travel Radio

Hi Gang,

A clarification: the radio I am asking about is NOT the qrp 20 meter radio. It is the one shown below the qrp rigs in the 1990 catalog (the latest that I have) and is a 15 watt transceiver.

73

Grover

(Preserve the Mother Tongue - fie on this "72" silliness.)

From qrp-admin@Think.COM Tue Feb 22 22:08:17 1994
Date: Tue, 22 Feb 94 18:58:04 PST
From: mont@ibmmail.COM
Subject: coax line losses

> I just wondered how important a balun was for working QRP since it
> does incur some line losses? I feed my 20 meter resonant dipole with a RG-58
> coax, do I need a balun at the feed point? Will this improve my txrx signal?
> I am operating some 3 watts into the antenna.
>

> Tks.
>
> 73 de 9V Daniel

I've ran dipoles with and without baluns and never noticed any significant difference. But, usually when I don't use a balun I use RG-59 since it's impedance more closely matches the antenna.

I have another question that, considering qrp power levels, is more important then I originally gave credit for.

Does RG-59 (75-ohm) cable have less loss per foot then RG-58 (50-ohm) cable?

I know that verticals tend to be close to 52 ohms and dipoles are about 70 ohms. How much difference does it really make to use 75 ohm coax to a dipole, but then have a 50/75 ohm mismatch at the transmitter?

tnx,
km6wt

From qrp-admin@Think.COM Wed Feb 23 00:33:10 1994
Date: 23 Feb 1994 13:34:08 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: coax line losses

Hi KM6WT,

Tks for the reply on the balun usage. Actually I started thinking of the balun as a means of getting more effective shielding for the feed line from external RFI but you're right, it does not seem to make much of a diff.

Concerning your second question, really interesting. I've been wondering about that too and I remember seeing a 75 ohm to 50 ohm transformer in the 1994 ARRL Handbook. May try that out but does anyone know what the effect of perfect matching will have on the antenna performance.

Hmm.... also concerning the cable to use, I suppose the main issue is the line losses since either case you still will have a 50 ohm source looking into a 75 ohm load. Wonder if that transformer will mean more ERP?

BTW my feed is LONG, some 30-40 meters of RG-58. Is this too much for HF (20 meter) operation or is the losses negligible?

73 de 9V Daniel

From qrp-admin@Think.COM Tue Feb 22 18:57:37 1994
Date: Tue, 22 Feb 94 16:02:20 PST
From: Spence S Wilhelm <Spence_S_Wilhelm@ccm.hf.intel.com>
Subject: cross mode qso during lunch

Text item: Text_1

During lunch today I ran to the ham shack we have here at work hoping to make some contacts. The bands were not in at all, must be having a solar storm. I was just about to give up when I heard VE0EE calling CQ on SSB in the novice portion of 15 meters. It was too much, I couldn't resist so I answered him using CW with our Kenwood TS440 turned down to about 5 watts. He came back and said, "yes I hear you I think your from 7 land". We tried for several minutes until I caved and cranked the power up to 100+ watts. I feel so dirty... QRO :-(. But on the bright side, VE0EE was operating maritime mobile in the Bahamas and he did hear my QRP signal and was patient enough to listen. Several firsts for me on this one, maritime mobile, Bahama, cross mode QSO, first QRO contact in over a year(yuk!). :-)

.... ..

de kb7tcy, spence

From qrp-admin@Think.COM Mon Feb 28 00:13:16 1994
Date: Sun, 27 Feb 94 21:13:04 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Dan's Small Parts

I think that someone asked about Dan's address.

Here it is again:

Dan's Small Parts & Kits
1935 South 3rd West #1
Missoula, MT 59801

He has the new NN1G CW Superhet Single Band Transceiver Kit. Available in 20M, 30M, 40M, 80M. \$59.95 plus \$3.75 S/H. (catalog - 2 stamps US).

hope this helps.

dit dit
Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Wed Mar 2 07:50:56 1994
From: mvjfm@mvubr.att.com
Date: Wed, 2 Mar 94 07:42 EST
Subject: Dayton

Dayton room reservation manager (& ARCI Treasurer)
Myron Koyle N8DHT
216 477 5717

From qrp-admin@Think.COM Wed Mar 2 15:32:23 1994
From: mvjfm@mvubr.att.com
Date: Wed, 2 Mar 94 15:05 EST
Subject: Dayton

Just got a call from Myron Koyle.
If you are planning to go to Dayton and want a room with
the QRPers, please call him right away.
216 477 5717

I am flying with American Airlines out of Manchester NH.
At \$188 it is one of the lowest prices ever.
Most of us will be there from Thursday 4/28 until 5/1.

Roy Lewellen, Doug DeMaw, Wes Hayward, Randy Rand, and
other legends have attended in past years.

73/72 Jim Fitton, W1FMR QRP-NE mvjfm@mvubr.att.com

From qrp-admin@Think.COM Wed Mar 2 22:55:54 1994
Date: Wed, 2 Mar 94 19:55:31 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Dayton

Gang,

I talked to Myron Koyle, N8DHT, Secretary/Treasurer for QRP ARCI a few hours ago.

There are 15 rooms still left at Dayton for you QRPers. These rooms go for \$70 per night. This does not depend upon the number of people in the room. So if you can pair up with someone, then it's \$35 plus tax per person, etc. Of course, if you get more you'll have to bring sleeping bags, I suppose. I leave it as an exercise for the student. :-)

If you think you'll be buying a lot of junk ^h^h^h uhuh equipment, then you may want the whole room to yourself.

Anyway, send check made out to "Days Inn - Dayton South" for \$70 (one nights rent) to Myron Koyle, 1101 Miles Ave SW, Canton, OH 44710. Might include note with SASE if you want non-smoking, etc.

These puppies should go in a hurry.

There will be shuttle service to the convention. Takes about 20 minutes.

Also am told the food is great at the Days Inn.

See you in Dayton.

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Thu Mar 3 12:02:32 1994
Date: Thu, 3 Mar 94 09:02:12 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: Dayton again

Oh, be sure to mention what day(s) you'll be there. everyone recommends all of them, 'cuz there is too much to see as it is.

dit dit
Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Tue Mar 1 15:54:42 1994
Date: Tue, 01 Mar 1994 14:53:30 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: Dayton ARCI room reservations

Hi,

wonder if anyone knows anything about the Dayton room reservations through ARCI. Quite a while ago Jim Kearman posted the amount and address to send a deposit to hold a room for Dayton. I promptly sent my check.. never received any confirmation from the person or the motel.. have no idea where it is, if I have a room or how to get there.

thanks if anyone can help.

72

Jeff

From qrp-admin@Think.COM Mon Feb 28 21:33:06 1994
Date: 01 Mar 1994 10:30:05 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Dipole horizontal or vertical?

Hi QRP(p)ers,

I'd just like to find out from you, which do you consider a better antenna for working DX using QRP? A Horizontal dipole or vertical? What are the related considerations, eg. height, length, ground etc etc.

73 de 9V Daniel

From qrp-admin@Think.COM Tue Mar 1 12:12:03 1994
From: Randall Rhea <randall@informix.com>
Subject: Re: Dipole horizontal or vertical?
Date: Tue, 1 Mar 94 11:04:36 CST

=>

=>Hi QRP(p)ers,

=>

=> I'd just like to find out from you, which do you consider a better
=>antenna for working DX using QRP? A Horizontal dipole or vertical? What are
=>the related considerations, eg. height, length, ground etc etc.

It depends on your situation. In general, a horizontal antenna is better for DX. It generally picks up less noise, and it generally

radiates your signal better for DX.

If you cannot install a horizontal antenna at least 1/4-wavelength above the ground, then generally your signal will be radiated straight up into the air, which can be bad for DX. Then it's time to look at a vertical. I say "generally" a lot because it depends on your location. For bands like 160m, where it is usually impossible to install a horizontal antenna 1/4-wavelength above the ground, hams use verticals for transmitting.

The problem with verticals is that they require extensive radial systems for ground. For shorter wavelengths, (e.g. 10m, 15m, maybe 20m) a ground plane provides a good ground, but a horizontal will work better for these bands. For 40m, a number of hams use verticals, even shorted verticals with big "top hats", but they use a lot of radials. There are some manufacturers that sell "no radial", "shortened" antennas for HF, but don't expect to get any performance from them, especially for QRP. Think of the Earth as a big sponge that soaks up your signal if you don't have a good radial system.

I sometimes use a random length wire attached to an antenna tuner thrown up into a tree. I also use a 1/4-wave wire attached to the ground terminal of the tuner for each band I work. This is a nice, multi-band, portable "vertical" antenna. It does not work as well as a dipole, but it's easy to carry around and install.

```
=====
Randall Rhea                                Informix Software, Inc.
Project Manager, MIS Sales/Marketing Systems  randall@informix.com
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From qrp-admin@Think.COM Tue Mar 1 12:15:39 1994
Date: 01 Mar 1994 12:11:47 -0500 (EST)
From: "D A Coleman (ext. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: Re: Dipole horizontal or vertical?

GA, OM

Ed Tilton, W1Hdq, late of ARRL, always used to say that the only thing to be gained by using a vertical, when there was something to be gained, is height. That's the view that my experience would seem to bear out. Sometimes it's fun to play with a vertical, especially if you've already got a good horizontal. (I'm assuming dipoles in both cases.), but I've never yet seen a vertical antenna that really made me want to get rid of those cumbersome old horizontal wires.

Incidentally, Whether you're running qrp or not doesn't matter if you're consistently interested in getting the most out of every watt (or milliwatt--or

microwatt, etc.)

72.9093726

Don Coleman, W1VOQ

From qrp-admin@Think.COM Fri Mar 4 16:28:41 1994
From: mvjfm@mvubr.att.com
Date: Fri, 4 Mar 94 16:20 EST
Subject: Distance...

This morning I keyed my crystal controlled transmitter and heard my signal in the receiver.....Long path....I think.
Maybe a new worlds record.....
What say Chuck ?

FMR

From qrp-admin@Think.COM Wed Feb 23 10:37:11 1994
Date: Wed, 23 Feb 94 10:37:45 EST
From: jfw@ksr.com (John F. Woods)
Subject: Does anyone know my number?

It's (past) time to send my QRP-NE renewal, and I can't find my QRP-NE number.
(I'm SURE it's in one of those boxes left over from moving last autumn....-().
Does anyone happen to have a membership list real handy? Thanks.
John Woods, WB7EEL

From qrp-admin@Think.COM Wed Mar 2 07:51:18 1994
Date: Wed, 2 Mar 94 04:50:58 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: DX Call Server

Gang,

Someone asked about the possibility of an on-line server for DX.

As many have noted, there is no CDROM with the information on it for DX (outside the USofA). The reason for this is because of the number of licensing organizations that exist in the world today. Think about it. Over 300 countries on the ARRL DXCC list. Many of them probably don't have a computer database and certainly there is no ISO Standard for the data.

I don't know the details and we probably won't see it published, but it must be some struggle for the 'Callbook' publishers to get this information and keep it up to date. They certainly aren't going to put the information on CDROM for the rest of the world to rip-off. Just think of the economics of running their bread-and-butter business.

My two cents from the ranch.

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Thu Mar 3 15:42:58 1994
From: mvjfm@mvubr.att.com
Date: Thu, 3 Mar 94 14:44 EST
Subject: Feedlines

Be careful of TV twinlead. When it gets dirty it gets lossy.
450 ohm ladderline may be a better choice but it is larger
than needed for QRP.

W1FMR

From qrp-admin@Think.COM Thu Mar 3 16:33:41 1994
From: Randall Rhea <randall@informix.com>
Subject: Re: Feedlines
Date: Thu, 3 Mar 94 15:33:04 CST

=>

=>

=>Be careful of TV twinlead. When it gets dirty it gets lossy.
=>450 ohm ladderline may be a better choice but it is larger
=>than needed for QRP.

If you use 300 ohm TV twinlead, be sure to use the good stuff.
Sometimes hardware stores have it. It's thick, and designed
to handle outdoor use. The stuff at Radio Shack is for indoors
and will not work well.

Randall Rhea Informix Software, Inc.
Project Manager, MIS Sales/Marketing Systems randall@informix.com

From qrp-admin@Think.COM Tue Mar 1 14:41:47 1994
Date: Tue, 01 Mar 94 14:19:26 EST
From: Greg Buhyoff <BUHYOFF@VTVM1.CC.VT.EDU>
Subject: Forsale - Paddle and Keyer

Schurr dual paddle (Wabblers), beautiful brushed brass, handmade in Germany, with plexiglas cover. On heavy brass base. This is not the PROFI model. The PROFI model is a bit larger and heavier. However, this is a full sized paddle and does not wander on the desk. If you have ever seen a Schurr then you know what hand-made beauty is. New condition and used for about a month. Sell for \$115.00 Plus Shipping. Cost new was \$ 160.00.

Lil' Buzzer K5 Curtis Keyer, works perfectly, with 8044 chip.
Excellent cosmetic condition with original instructions.
Sell for \$45.00 including shipping.

Daytime phone -- 703-231-5148 between 8 am and 3 pm EDT.

Thanks, Greg KN4FR

From qrp-admin@Think.COM Thu Feb 24 13:42:42 1994
Date: Thu, 24 Feb 1994 10:41:49 PST
From: David_Shalita.ES_AE@xerox.com
Subject: Forwarding: Parts List and Schematic for NN1G-MKII

Date: Thursday, February 24, 1994 10:39 am
To: qrp@think.com
Copies: David Shalita
Sender: D.R. Shalita
From: David Shalita
Subject: Parts List and Schematic for NN1G-MKII
Answer to: David Shalita
Text:

Hi
Nice to see all of the Parts Lists appearing for the R1, R2 and T1 gear.
Is it possible Parts Lists and Schematic can be produced and stored for the NN1G-MKII gear? Where else can I get this info? Possibly a QRP newsletter or some ham magazine?

Thanks for any info. I just mailed my application for membership to NorCal, so I am not familiar with contents of any QRP newsletters yet.

73 Dave, w6mik

From qrp-admin@Think.COM Wed Feb 23 14:05:28 1994
Date: Wed, 23 Feb 1994 13:04:34 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: fun

Hi,

Just took a student worker to lunch. Was giving my opinion of the relationship of geomagnetic storms, bad WX and bad radio conditions.

On the way home while driving my stick shift car through the center of town (big busy street), I turned on the Argonaut 509... in the SSB portion of the band (I do this as a courtesy to non-ham passengers.. haven't really quite mastered the microphone yet). Well as I pulled out the knob on the Argo.. heard the magic words "CQ CQ.." Dug the mike frantically out of the glove compartment and answered his call.. he got all except the first letter.. after that he said 58-59 into LI, NY.. I was brought up there.. so had a great chat all the way home and into the parking lot and then some... He made me repeat the power level a few times... "How many watts.. what rig?"

Well maybe have one future ham.. the student and one future QRP convert.. not bad for a quick lunch.

72

Jeff, AC4HF

From qrp-admin@Think.COM Wed Feb 23 15:21:09 1994
Date: Wed, 23 Feb 1994 13:04:34 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: fun

Hi,

Just took a student worker to lunch. Was giving my opinion of the relationship of geomagnetic storms, bad WX and bad radio conditions.

On the way home while driving my stick shift car through the center of town (big busy street), I turned on the Argonaut 509... in the SSB portion of the band (I do this as a courtesy to non-ham passengers.. haven't really quite mastered the microphone yet). Well as I pulled out the knob on the Argo.. heard the magic words "CQ CQ.." Dug the mike

frantically out of the glove compartment and answered his call.. he got all except the first letter.. after that he said 58-59 into LI, NY.. I was brought up there.. so had a great chat all the way home and into the parking lot and then some... He made me repeat the power level a few times... "How many watts.. what rig?"

Well maybe have one future ham.. the student and one future QRP convert.. not bad for a quick lunch.

72

Jeff, AC4HF

From qrp-admin@Think.COM Thu Feb 24 14:26:53 1994
Date: Thu, 24 Feb 94 14:27:31 EST
From: jfw@ksr.com (John F. Woods)
Subject: Fun new parts at DIGIKEY

OK, so they're not really new, but they're new to everyone's favorite ham-friendly "real" distributor. Digikey's latest catalog carries the LM6321N, which I *think* is the high-speed buffer used in one of Gary Breed's transceiver projects in QST a couple of years back (50MHz bandwidth, unity voltage gain (or close to it), turns 5M-ohm input impedance to 50-ohm output impedance. (I plan to order a few as soon as I dig up that QST and confirm.) They also now have the LM6364N, and LM6365N, which are high-speed op amps with 175MHz and 725MHz gain bandwidths, respectively; stable to gains as low as +5 and +25 respectively (the LM6365 is the "archetype" of the family, and the 6364 and 6361 are compensated for stability at lower gain (the LM6361 is stable at unity gain; I had bought a few of them to try as "substitutes" for the 6321, but now that I can get the real thing...).

The LM6321 is \$10.80 each, a bit much to fill a junk box with...

73, John, WB7EEL

From qrp-admin@Think.COM Fri Feb 25 23:58:27 1994
Date: Fri, 25 Feb 1994 20:49:10 -0800
From: ROHRWERK@holonet.net
Subject: Fun new parts at DIGIKEY

On 02-24-94, jfw@ksr.com wrote to QRP@Think.COM:

>-----

They also now have the LM6364N, and LM6365N, which are high-speed op amps with 175MHz and 725MHz gain bandwidths, respectively; stable to

>-----

I had heard of such devices, and now here they are!

Does this mean a practical active filter that could work at common IF frequencies? Does it mean goodbye to crystal filters? (Maybe dynamic range is a question).

Interesting possibilities. I had been thinking of building a CW crystal filter for my old Signal/One CX7A (8.8 MHz IF, probably custom ground crystals). Would this be another possibility? What sort of precautions must one take using such opamps at radio frequencies?

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Sat Feb 26 21:10:19 1994
From: mvjfm@mvubr.att.com
Date: Sat, 26 Feb 94 21:04 EST
Subject: G-QRP

Rcvd a call from George Dobbs, G3RJV this morning. He is looking forward to seeing everybody at Dayton.
You can sign up or renew your G-QRP Club membership at Dayton, or send it to Dick Pascoe, G0BPS.

G - CW contest this weekend:
Worked a few G-QRP club members this evening (NorCal-40).
Dont know if they were running QRP or not.

Only 2 checked into the NEN Net this morning, VE2DRB/inet
and W1FMR/inet.

What do you usually do with your HB rig ?

72 W1FMR

From qrp-admin@Think.COM Sun Feb 27 12:21:08 1994
Date: Sun, 27 Feb 1994 09:17:16 -0800 (PST)
From: stark <mswmod@sage.unr.edu>
Subject: Re: G-QRP

On Sat, 26 Feb 1994 mvjf@mvubr.att.com wrote:

>
>
> Only 2 checked into the NEN Net this morning, VE2DRB/inet
> and W1FMR/inet.
>
> 72 W1FMR
>

I was listing from 1300z to 1330z. All I ever heard was one
SSB signal from XE land and a beacon(?) sending "F" at about
5 wpm.

Tried sending QSP etc a few times but nothing.

That sure is early on a Sat am out here in Reno, NV. Next time
my mind slips and I'm up that early, I'll try again!

73, Ron, KU7Y

From qrp-admin@Think.COM Sun Feb 27 13:13:09 1994
Date: Sun, 27 Feb 94 11:14:01 -0700
From: tjf@beta.lanl.gov (Tom J Farish)
Subject: Re: G-QRP

Hey, I'd check into the NEN net if it was held at a civilized time! You
know, most of the US 2-3 hours earlier than you East-coasters! How 'bout
starting an hour or two later?

Tom
KJ5LT

Up at 6AM 7 days a week. (Mountain time!)

From qrp-admin@Think.COM Fri Mar 4 13:01:01 1994
Date: Fri, 4 Mar 94 10:07:05 PST
From: Spence S Wilhelm <Spence_S_Wilhelm@ccm.hf.intel.com>
Subject: General class license + Norcal 40 + Hamstick... Hot!!!

Text item: Text_1

Hi,

Last weekend was very busy for me in ham radio. I upgraded to general class, finished my Norcal 40, and finished installing a 40 meter Hamstick antenna on my car, all during the same weekend. After receiving the radio three weeks ago and not having time to work on it I got inspired and assembled it in about 7 hours over Friday and Saturday. The instructions were very good and saved me a lot of trouble with the suggestion to visually check the bottom of the board for shorts before starting. I found a two areas near the RIT pot where traces were touching but were easily fixed with an Exacto knife. The board was otherwise very clean and well laid out. Part locations were be easily recognized by silk screen id on the top of the board. I've heard others complain about winding toroids and have to admit the activity is tedious at best. It also doesn't help to be winding the VFO toroid, which has fifty seven turns, while watching the late show with David Letterman. I had to recount the turns on that sucker at least five times, I can't count and laugh at the same time. :-)

The big moment came on Saturday afternoon when I connected the power and heard the sweetest sounding receiver yet. The audio is phenomenal, the 400 Hz CW filter is perfect for separating weak signals out of adjacent signals. The Norcal 40 is my first rig with a crystal filter, my Argo 509 with the audio CW filter has a much different sound that can't compare to this rig. (Don't flame me, there is still a warm spot in my heart for the 509.) I'm now a convert of IF filtering versus audio filtering. I also installed the mods that will be published in the March issue of QRPp for expanding the bandwidth to ~150KHz. Part of the modification was installation of a ten turn pot in place of the single turn 100K tuning pot, this really improved the tunability, you really have fine control now. Alignment instructions for the receiver and the transmitter are complete and easy to follow. It only took about 5 minutes and the rig was ready to go on the air with two watts across the complete tuning range of the radio.

I finished the Norcal 40 at 3PM on Saturday and took the General written and 13 WPM test at 7:30PM. The written test went fine, but, I thought I was going to throw up during the 13WPM code test. The only thing that calmed me down was to pretend that it was my father Harvey, W7UKK, sending to me. This strategy worked fine until the operator called me by a different name and had nothing close to my fathers name. :-)

Oh well, it all worked out and I had my General temporary ticket by 10:30PM that night.

Sunday afternoon, I put the Hamstick on the car and tuned it up with no problems. (I'll write another article about my stupidity and learning curve with my first attempt at tuning a mobile antenna the week before.) My first QSO was with a K5 in TX who gave me a 579, the second was with an N7 in OR who gave me a 599. What an experience! I've been a ham since 87 with only Novice HF privileges. Now I'm wondering why it took me so long to upgrade. If you are a Novice, go as quick as you can and upgrade! Don't let the written or the code test bug you. Really, If I can do it then anyone can. I'm surprised at how easy it is to copy 13WPM+ now, mental block or something before.

In summary, I'm delighted with the General ticket, the Norcal 40, and the Hamstick mobile antenna. I thought QRP was fun for six years as a Novice, but really had no idea. Why did I wait so long to upgrade? Many thanks to Doug, Wayne, and Jim, for providing such a great kit and inspiring me to upgrade.

72,

Spence Wilhelm, KB7TCY
Queen Creek, Arizona

From qrp-admin@Think.COM Fri Mar 4 14:53:24 1994
Date: Fri, 4 Mar 94 11:16:03 PST
From: Spence S Wilhelm <Spence_S_Wilhelm@ccm.hf.intel.com>
Subject: General class license + Norcal 40 + Hamstick... Hot!!!

Text item: Text_1

sri abt previous post, margins...spence

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CW filter has a much different sound that can't compare to this rig. (Don't flame me, there is still a warm spot in my heart for the 509.) I'm now a convert of IF filtering versus audio filtering. I also installed the mods that will be published in the March issue of QRPp for expanding the bandwidth to ~150KHz. Part of the modification was installation of a ten turn pot in place of the single turn 100K tuning pot, this really improved the tunability, you really have fine control now. Alignment instructions for the receiver and the transmitter are complete and easy to follow. It only took about 5 minutes and the rig was ready to go on the air with two watts across the complete tuning range of the radio.

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In summary, I'm delighted with the General ticket, the Norcal 40, and the Hamstick mobile antenna. I thought QRP was fun for six years as a Novice, but really had no idea. Why did I wait so long to upgrade? Many thanks to Doug, Wayne, and Jim, for providing such a great kit and inspiring me to upgrade.

72,

Spence Wilhelm, KB7TCY
Queen Creek, Arizona

From qrp-admin@Think.COM Sat Feb 26 14:46:52 1994
Date: Sat, 26 Feb 94 14:49:02 EST
From: hysell@Kodak.COM (John D. Hysell)
Subject: GIF images

The 3 GIF files have been moved to /public/pub/radio/ham/qrp/artwork/gif
-thanks

From qrp-admin@Think.COM Mon Feb 21 17:15:56 1994
Date: Mon, 21 Feb 1994 17:15:41 -0500 (EST)
From: howie cahn <howi@world.std.com>
Subject: HB/modular radios

I think that all the discussion about what true 'homebrew' is has done is to prove that there's no real answer and I'm not sure there's any point in trying to find one. It's not like the definition of QRP where you can measure compliance with a wattmeter. The only place where it matters at all is in the scoring of a few QRP contests. There, I think a vague phrase like "substantial operator involvement in the design or construction of the equipment" would be sufficient. I agree with Laura, VE7LDH, and others, that the definition should be pretty loose to let people work their way up the construction ladder at whatever rate they want.

Something that's been missed, so far, is, What about equipment that's a mixture of homebrew and commercial pieces? A few examples:

- .Ten-Tec, in their nice new kit catalog, describes boards like Tx RF decks, switch modules, etc., that you can build a rig around.

- . There's a lot of interest in replacing a radio's audio section with a computer-based SoundBlaster-type board where you use DSP to implement configurable filters, AGC, and packet modems. Several people here on the net say they're working on the software now.

- . There are frequency synthesizers available, like the DDS boards described by John, N9JZW, in _73_.

The point is that, increasingly, 'homebrew' equipment is going to be made up of combinations of pieces like these. Just about all homebrew stuff is primitive compared to a commercial transceiver. It's practically impossible for one person to design and build a state-of-the-art radio these days. If the only choice people have is either 'pure' homebrew or a commercial transceiver, most of them are going to buy their rigs. Instead, a way to get them involved with their radios, without giving up the performance they're used to, is to encourage the trend of building radios from modules. The radio would be a hybrid, some combination of: commercially bought pieces, boards constructed from kits or magazine articles, and modules designed from scratch. Rather than splitting hairs

about what homebrew is, it would be more productive to working on defining the standards for these modules.

72/73... howie, wb2cpu

From qrp-admin@Think.COM Thu Feb 24 11:26:10 1994
Date: Thu, 24 Feb 1994 10:25:10 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: Help

Well gang.. getting bored.. so time for some more projects.. HI HI

I am working on writing an article whose purpose it will be to help new hams in their search for used HF gear.

I am very interested in personal opinions/comments that might help in this matter.

here is the proposed outline:

HF Rigs, Buying Used Gear

- Some tubes vs all transistors and what it means to ham
- what bands does it cover (WARC?)
- what modes does it have (CW/SSB/FM/FSK)
- built in vs. external power supply
- size
- price range
- extras: RIT,XIT, adjustable IF, filtering, computer control for banswitching and such,
 - option available, dual VFO and its use, speech processing, other
- good bets in different price ranges
- is rig especially good on one mode (cw vs ssb)
- can rig be easily turned down to QRP levels (optional section)
- built in cw keyer or filters

comments, suggestion are VERY appreciated

thanks...

Jeff, AC4HF

From qrp-admin@Think.COM Mon Feb 21 23:00:33 1994
Date: Mon, 21 Feb 1994 19:58:34 -0800
From: ROHRWERK@holonet.net
Subject: homebrew Y/N Answered

On 02-21-94, jdc@sunsrvr2.cci.com wrote to laurahal@microsoft.com

>-----
Calling a Heathkit or Ramsey builder an "appliance operator" is
excessively harsh and counterproductive. Let's give these people
a break and encourage them in their efforts. Who cares if it doesn't

>-----

Especially a Ramsey builder :-) ! From some rumors, you practically have
to redesign some of them.

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Mon Feb 21 07:10:59 1994
Date: Sat, 19 Feb 94 13:43:42 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: homebrew Y/N Answered from the UK

>
>Dick et al,
> To add a little fuel to the fire (but not to flame!) let's look
>at an analogy: One can go to the grocery store and buy ready-made
>cookie dough; once at home one can separate the the already-sliced
>dough (you don't even get to slice it yourself!) and lay the pieces
>on a cookie sheet and bake until golden brown. Now, can we say that
>those cookies are home-made cookies? I don't think ANYONE would take
>that credit.
>

No, but there are those who will!

Furthermore, it will change the future of amateur radio and qrp.

In the 30's every amateur radio operator built their own transmitter
and receiver. During the 50's it was common to find an amateur station

station with a homebrew transmitter and a commercial receiver. With the 60's came the appliance operator. BTW, W1AAZ is not an OT (first licensed in 1958 at 12 years of age). Contesting used to be fun. Today's super stations (equipment and power) took the interest and fun away.

I thought that the homebrew category was meant to promote and preserve the spirit of amateur radio by providing a handicap that would account for the differences in equipment performance.

With the technology and parts available today, homebrew has never been easier. Equipment even approaching state-of-the-art performance can be constructed by a builder willing to invest in a bit of knowledge, time and experimentation. This is unfortunate, for one of the most exciting experiences available to the radio amateur is the thrill that results from using equipment that they have constructed themselves.

After the store bought cookie dough, connect the dots and the paint by the numbers no longer provide thrills, fun, and challenge; will QRP super station pick up the slack?

>Dick, which came first the callsign or the company name? Kanga - GØR00 -
>that's cute!

As was the lobbying.

BTW, did you know that American GI's homebrewed radio receivers during WWII? And they made their own diodes too, using a razor blade and a piece of lead.

73

Ed W1AAZ

talk jeff@auratek.com
talk jeff@auratek
can you give me 5 min to talk jeff @auratek

talkj f
talk jeff@auratek

can you give me 5 minutes more to finish

From qrp-admin@Think.COM Mon Feb 21 07:57:22 1994
Date: Mon, 21 Feb 1994 07:56:31 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: homebrew Y/N Answered from the UK

> >Dick et al,
> > To add a little fuel to the fire (but not to flame!) let's look
> >at an analogy: One can go to the grocery store and buy ready-made
> >cookie dough; once at home one can separate the the already-sliced
> >dough (you don't even get to slice it yourself!) and lay the pieces
> >on a cookie sheet and bake until golden brown. Now, can we say that
> >those cookies are home-made cookies? I don't think ANYONE would take
> >that credit.
> >
>
> No, but there are those who will!
>
> Furthermore, it will change the future of amateur radio and qrp.
>
> In the 30's every amateur radio operator built their own transmitter
> and receiver. During the 50's it was common to find an amateur station
> station with a homebrew transmitter and a commercial receiver. With the
> 60's came the appliance operator. BTW, W1AAZ is not an OT (first licensed
> in 1958 at 12 years of age).

Careful, we might start a debate on what is an OT. Seems with all the influx of new hams, I'm a OT now. But with the current thread of thought, we might have to call everybody an OT just to be fair....

>Contesting used to be fun. Today's super
> stations (equipment and power) took the interest and fun away.
>
>
> I thought that the homebrew category was meant to promote and preserve the
> the spirit of amateur radio by providing a handicap that would account for
> the differences in equipment performance.

YES

>
> With the technology and parts available today, homebrew has never been
> easier. Equipment even approaching state-of-the-art performance can be
> constructed by a builder willing to invest in a bit of knowledge, time
> and experimentation.

EG: NE602 LM386.....etc.

> This is unfortunate, for one of the most exciting experiences available to

> the radio amateur is the thrill that results from using equipment that
> they have constructed themselves.
>
> After the store bought cookie dough, connect the dots and the paint by
> the numbers no longer provide thrills, fun, and challenge; will QRP super
> station pick up the slack?
>
> >Dick, which came first the callsign or the company name? Kanga - G0R00 -
> >that's cute!
>
> As was the lobbying.
>

:~)!
Hold on, let me get up off the floor.

> BTW, did you know that american GI's homebrewed radio receivers during
> WWII? And they made their own diodes too, using a razor blade and a piece
> of lead.

Yes, and you must be an OT to know that one, geesh . I still remember my mom
giving me the don't kill yourself look when I wanted that razor blade to
"play with".

73 Brad WB8YGG

>
> 73
>
> Ed W1AAZ
>

From qrp-admin@Think.COM Mon Feb 21 10:39:46 1994
Date: Mon, 21 Feb 94 09:19:31 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: homebrew Y/N Answered from the UK

>
>Dick et al,
> To add a little fuel to the fire (but not to flame!) let's look
>at an analogy: One can go to the grocery store and buy ready-made
>cookie dough; once at home one can separate the the already-sliced
>dough (you don't even get to slice it yourself!) and lay the pieces
>on a cookie sheet and bake until golden brown. Now, can we say that
>those cookies are home-made cookies? I don't think ANYONE would take

>that credit.

>

No, but there are those who will!

Furthermore, it will change the future of amateur radio and qrp.

In the 30's every amateur radio operator built their own transmitter and receiver. During the 50's it was common to find an amateur station station with a homebrew transmitter and a commercial receiver. With the 60's came the appliance operator. BTW, W1AAZ is not an OT (first licensed in 1958 at 12 years of age). Contesting used to be fun. Todays super stations (equipment and power) took the interest and fun away.

I thought that the homebrew category was meant to promote homebrew and preserve the spirit of amateur radio by providing a handicap that would account for the differences skill and equipment performance(s).

With the technology and parts avialable today, homebrew has never been easier. Equipment even approaching state-of-the-art performance can be constructed by a builder willing to invest in a bit of knowledge, time and experimentation.

This is unfortunate, for one of the most exciting experiences available to the radio amateur is the thrill that results from using equipment that they have constructed themselves.

After the store bought cookie dough, connect the dots and the paint by the numbers no longer provide thrills, fun, and challenge; will QRP super station pick up the slack?

>Dick, which came first the callsign or the company name? Kanga - G0R00 -
>that's cute!

As was the pitch.

BTW, did you know that american GI's homebrewed radio receivers during WWII? And they made their own diodes too, using a razor blade and a piece of lead (and no, I am not a proponent of every part from scratch).

73

Ed W1AAZ

From qrp-admin@Think.COM Mon Feb 21 12:53:15 1994

From: laurahal@microsoft.com
Subject: Re: homebrew Y/N Answered from the UK
Date: Mon, 21 Feb 94 09:48:00 PST

I'm relatively new to being a licensed amateur, but have been around the hobby and an active SWL for years. In an era where appliance operators are the norm, and where many new hams don't even know how to put up an HF dipole, I'm prepared to be lenient on the definition of "home brew", and I would hope others will be too. If you build something from a kit there is, at least theoretically, a chance that you might understand something about how the thing works and might have learned something along the way. This is far more constructive than endless debates about pizzas and cookie dough and rather than scaring people away from homebrewing, may encourage them to try modifying equipment, try experimenting with things, and maybe build the occasional item from a kit, or completely from scratch. Which is what we want, after all.

I bought one of MFJ's antenna analyzers over the weekend, BTW. The one that goes from 1.8 to 170 MHz and has a frequency counter. Great fun, and useful too. The only ergonomic glitch is putting batteries in the thing: you have to open up the case (8 screws!), put 8 AA cells in the holders, hook up the connectors, and bolt the whole mess back together. MFJ's quality control seems to be improving - the PC board looked good, and they got the frequency counter module from Opto-Electronics. But whoever installed the output connector could use soldering lessons. I compared what the MFJ machine told me with SWR readings from my wattmeter, transmitter loading (on the ham bands, of course...) and received signal strengths. All showed strong agreement, like when I set the MFJ machine to 15260 kHz, twiddled the transmatch for 1:1 SWR, turned on my FRG-7 and heard the BBC at S9 from Ascension Island. Changing any adjustment on the transmatch sent the signal down into the noise...the blasted thing won't find me a match on 10, 12 or 20m, but from what I hear on most weekends, this is not a major loss...

73 from Burnaby,
laura VE7LDH

From qxp-admin@Think.COM Mon Feb 21 16:48:53 1994
Date: Mon, 21 Feb 94 15:35:27 EST
From: jdc@sunsrvr2.cci.com (James D. Cronin)
Subject: Re: homebrew Y/N Answered from the UK

>

>I'm relatively new to being a licensed amateur, but have been around the
>hobby and an active SWL for years. In an era where appliance operators are
>the norm, and where many new hams don't even know how to put up an HF
>dipole, I'm prepared to be lenient on the definition of "home brew", and I

> >laura VE7LDH
> >
>
> Calling a Heathkit or Ramsey builder an "appliance operator" is
> excessively harsh and counterproductive. Let's give these people
> a break and encourage them in their efforts. Who cares if it doesn't
> qualify as "homebrew" under some arcane contesting rigamarole?
> Contesting is a waste of time and bandwidth, and certainly not a
> valid reason to set aside bandwidth for amateur operators. (As
> opposed to selling it for big bucks to commercial users.)
>
> Consider: Did any of you start out by building a crystal radio,
> or a simple Heathkit? Were you proud of your efforts? Now think.
> Would you be a ham radio operator today if somebody blasted you
> for not being "homebrew enough"?
>
> 73...Jim
> N2VNO
>

Hmmmmmmmm. I don't know what the situation is in Canada,
but my impression of it here in the US right now is that we need people
ON THE AIR actually USING the spectrum. If that means that homebrewing
takes second place, so be it. This "spectrum auction" stupidity
that is proposed here in the US makes it imperative that US hams start using
their spectrum or lose it. At least in the short term this is going
to be far more important than spending hours in a basement hacking
at some circuit.

With all due respect to Laura, I don't believe that being a
homebrewer necessarily makes one a *better ham*. It probably DOES make
one a better *homebrewer*. If our goal is to have better hams, we
need to teach some people some basic operating procedure and some
common courtesy on the bands, *especially* with respect to not
stomping on QRP ops.

Doesn't matter what kind of equipment you are running, if
a ham has poor operating habits. Factory or homebrew, he'll still
irritate the hell out of people.

I rather resent the implications of "appliance" operator.
Jim hit this one pretty well - I do the best I can under the circumstances
I have to get the most bang for my measely 10+ watts. I don't spend a
lot of time in contests because its obvious that most contests are
designed so that he who spends the most bucks for the most watts will
likely make the most Q's. IMHO, that *isn't* what ham radio is all about;
if you want to pay to talk to somebody pick up the damn phone! BUT -
that doesn't mean that in order to be a ham everything has to be

made out of cardboard tubes, band aids and pieces of plastic scrounged from god-knows-where, either.

Telling somebody that his hours spent over a Griefkit or Ramsey mean nothing really rankles me, too. At the very LEAST, being able to assemble one and make it work shows some competency in assembly, soldering and the ability to read. :-) Suggesting that hard-core homebrew is the ONLY way to go is the sort of snobbery that has chased more people away from amateur radio than anything else. Not every ham is an EE or EET; nor should they be.

As I have understood Amateur Radio since 1974, this ought to be a hobby to bring people *together*, not drive them apart over some trivial definitions.....

Duane
WB9OMC

From qrp-admin@Think.COM Sat Feb 19 19:05:27 1994
Date: Sat, 19 Feb 1994 18:44:49 -0500 (EST)
From: Rodney Clayton <rclayton@umd5.umd.edu>
Subject: Re: homebrew Y/N Answered from UK

On Fri, 18 Feb 1994, Jeff Herman wrote:

> Dick et al,
> To add a little fuel to the fire (but not to flame!) let's look
> at an analogy: One can go to the grocery store and buy ready-made
> cookie dough; once at home one can separate the the already-sliced
> dough (you don't even get to slice it yourself!) and lay the pieces
> on a cookie sheet and bake until golden brown. Now, can we say that
> those cookies are home-made cookies? I don't think ANYONE would take
> that credit.

On the other hand you can buy a bag of chocolate chips, follow the directions on the back, buy the stuff to make it and it's homemade. no calculations required. and with a pizza kit you get the stuff to make it in the box. You still have to mix it up kneed it up and bake it.

I would agree that there are different degrees of homebrew. Just like in the above example a chef could make things that in a class beyond the above. Does that make the above not cooking?

IT just seems excessive to me to say you have to be a radio god able to design from scratch in your head in order to say I built this radio myself. Noone builds a radio entirely by himself. How many people build superhet

receivers that can claim to have thought up the superhet? Its like people who don't do any math don't deserve any credit. Clearly people who do math deserve more credit. But that shouldn't mean the mathless person deserves no credit. IMHO.

see what's wrong with 3 catagories of radio: > - Store bought > - Kit
> - Homebrew (including winding your own coils and using some formulas,
> scronging for parts here and there and using a little math to
> make some substitutions for those impossible-to-find components;
> but NOT having to make any xsistors).
> - Hmmm, maybe a 4th class is needed: modification to the first two above
>
> One thing I've learned on internet: it's rare that one person can ever
> change another person's viewpoint!
>
> Maybe we should just dump this thread and get on the air and have fun! I
> promise I'll QSO with you no matter WHAT kind of rig you operate.
>
> Dick, which came first the callsign or the company name? Kanga - G0R00 -
> that's cute!
>
> Oh, the folks on the boatanchor mail net have a weakly CW non-contest
> on 3700kc - they call it the Friday Night Fist Fight - listen for
> CQ CWist (time?). I'm too far to the left (Hawaii) to hear anything. Phooey.
>
> 72 to everyone and have a great 3-day weekend,
> Jeff
>
> =====
> Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes
> old TV sets to make QRP transmitters (CW of course).
>
> Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)
>
> It is said that CW is the second most popular mode on HF, but scanning the
> bands I frequently count more CW QSOs than SSB QSOs.
> =====
>

From qrp-admin@Think.COM Fri Feb 25 14:02:49 1994
From: mvjfm@mvubr.att.com
Date: Fri, 25 Feb 94 13:34 EST
Subject: Hotel Antennas

To: QRP@Think.COM
Subject: Hotel Antennas

Status: R

Here is an updated version of a previously issued antenna article for hotels etc.....

A lot of hotels have sealed rooms and no balconies. I thought of bringing a small drill and making a tiny hole to push a wire out through, under the window.

I recommend small antenna tuners and SWR meters like the ones found in the ARRL QRP literature, (ie... 1987 ARRL Handbook page 34-11, and p150, 167 of ARRL Solid State Design, and p4 of April 1992, QRP-NE "72" newsletter).

Provide 2 quarter wavelength counterpoise wires (33' for 7 - 28 MHz) connected to the tuner ground, and a half wavelength of antenna wire (66' for 7 -28 MHz) connected to the tuner input terminal. You may be able to match the antenna by tuning the tuner for maximum receiver noise but I use the SWR indicator.

A single ended wire antenna is probably the most flexible, compact, quickest to erect, antenna for varying and unknown situations. The age old caveats still apply however, The higher, and in the clear, and further away from the building, the better. But, inside wires do work. Generally a horizontally placed antenna wire is best for local, while vertical does best for long distance.

While visiting KI6DS and N6KR in California, we put a 66' wire into a tree outside the hotel room and ran a 33' wire around the floor and another 33' wire across the outside balcony. I also ran a wire from the tuner to the hotel AC electrical ground receptacle.

With a small tuner (and SWR indicator) DX and east coast stations were worked using the 2 watt NorCal-40 prototype rig.

My SWR indicator has ~ 0.2 watts of loss through it, so after the antenna is correctly matched, it is removed when going after DX.

72, Jim - W1FMR

mvjff@mvubr.att.com

From qrp-admin@Think.COM Wed Mar 2 11:27:11 1994
Date: 02 Mar 1994 10:26:43 -0600 (CST)
From: KANAMAA%AMGATE%MATRXA@randb.abbott.com
Subject: Howdy

From: Kana, Michael (D9CY)
Date: Wed, Mar 2, 1994 10:26 AM
Subject: Howdy
To: QRP Group
Howdy all

This is my first posting on the QRP list. I have an avid interest in homebrew circuits as well as in vintage gear and microwave communications. Currently, I run QRP on my Ten Tec Omni V turned way down and with my RT3/RR3 GRC109 Special Forces rig.

One project I would like to try (after I get all my other projects built) is a flea sized qrp rig built with surface mount components. Has anyone out in net land worked with PA circuits using MMIC's? I use MMIC's for my microwave gear but have not yet in the low frequencies (read HF). Any thoughts???

72 es 73's de AA9IL
Mike Kana

From qrp-admin@Think.COM Tue Feb 22 10:53:17 1994
Date: 22 Feb 1994 23:54:35 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Importance of Baluns?

Hi,

I just wondered how important a balun was for working QRP since it does incur some line losses? I feed my 20 meter resonant dipole with a RG-58 coax, do I need a balun at the feed point? Will this improve my txrx signal? I am operating some 3 watts into the antenna.

Tks.

73 de 9V Daniel

From qrp-admin@Think.COM Fri Feb 25 06:54:02 1994
Date: Fri, 25 Feb 94 03:54:00 PST
From: achapma@eis.calstate.edu (Allan K. Chapman)
Subject: Info

Info requested re list of amateurs on both packet and Internet.
73.....Allan W6MEO@KJ6FY.#NOCAL.CA.USA.NA....achapma@ctp.org
5602 Raters Dr Santa Rosa, Ca 95409-4314 (707) 538-4935.

From qrp-admin@Think.COM Thu Mar 3 19:56:37 1994
Date: Thu, 3 Mar 94 17:02:24 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.hf.intel.com>
Subject: Introduction time!

Text item: Text_1

Hi QRP(p)-ers,

I'd like to introduce myself to the QRP net.

I'm Mike Pulley, WB4ZKA located in Chandler, AZ, a suburb of Phoenix. I've been licensed since 1972, but just became a convert to the QRP way of doing things about 3 weeks ago. My moment of enlightenment came while trying out Mark Gustoff's (W07T) OHR-20 3W xcvr at my company's club shack. (INSERT SOUND OF A HOOK, LINE, AND SINKER BEING SWALLOWED.) I now own MFJ's 20m 5W rig.

CW has always been my preferred mode, so QRP is a natural extension. The thrill of making contacts with little more than a toy radio (I would say a "20m CW CB rig", but I won't because it might be misunderstood) carries me back to my Novice days of sweaty log sheets, elevated heartbeat, and staring interminably at the mailbox awaiting goodies. ("Of course, I can quit anytime I want, I just don't want to, that's all." Right.)

The "WB4" callsign originates in AL with a brief tour in FL before arriving in AZ 6 years ago.

I moved 3 months ago and the home antenna is not erected yet. I use a ground mounted Butternut vertical with a *very* good ground plane of chicken wire. This new installation will feature a full 20m 1/4 wave chicken wire plane with as many longer radials as I can fit into corners and across the back alley. Given my constraints of budget, available supports (AZ is a desert after all!), and probably a little NIH, the Butternut has served me well for 5 years. Until I get my own antenna up, though, I use the club's roof mounted Butternut.

My interests are operating from home, perhaps mobile and portable. I lack the time and burning desire for construction projects just now.

Thanks for the hospitality already shown me.

Regards,

-- Mike, WB4ZKA

```
=====
Mike Pulley, WB4ZKA                                Intel Corporation
Phoenix, AZ                                         Mike_J_Pulley@ccm.hf.intel.com
=====
```

From qrp-admin@Think.COM Sat Feb 19 17:58:56 1994
Date: Sat, 19 Feb 1994 14:51:40
Subject: JFET VFOs -- Diode needed?
From: mjsilva@ted.win.net (Michael Silva)

In the February 1994 issue of QEX in an article on oscillator phase noise it is stated that the diode commonly placed between the gate of a JFET VFO and ground degrades the noise performance of the oscillator and does not improve the long-term stability. Any info or opinions on this?

Mike, KK6GM

From qrp-admin@Think.COM Wed Feb 23 11:32:33 1994
From: mvjfm@mvubr.att.com
Date: Wed, 23 Feb 94 09:47 EST
Subject: JH2AG

Anyone know who JH2AG is ?

I have never heard Japan any louder than S1 or 2 from New Hampshire and that station was S4 or S5 last night. Not only that, but there were no other asian DX stations heard on 40m at that time.

I hope he is for real, because I worked him the night before and will be very dissapointed if he is bogus, or a slim.

In the fall, a few asian russian stations are QRP workable, but it takes the guys with the 100 w. and a 4 square, or beam antennas to work JA or VK.

W1FMR

From qrp-admin@Think.COM Sun Feb 27 14:14:08 1994
Date: Sun, 27 Feb 94 19:08:50 GMT
From: dick@kanga.demon.co.uk (Dick G0BPS)
Subject: Jim Fitton RU lost

Hi Jim,
Lost your address here
can you call me, on here
I have a msg from George.

— —

Dick G0BPS / G0R00 A member of the DRAGON SLAYERS QRP Group
Kanga Products (Remember that sometimes the Dragon wins)

[The opinions expressed here are always that of the management,]
[I am the management!! (especially when she lets me)]

From qrp-admin@Think.COM Thu Mar 3 11:25:42 1994
From: Mark Oswood <oswood@psun.chem.yale.edu>
Subject: longitudes
Date: Thu, 3 Mar 94 11:31:19 EST

```
> I have 129,728 cities in a data base of city, long, lat data.
> It takes 10+ Megabytes of disk space on my workstation at
> home. I use it for the KMW award (1,000 mi/W). I'm looking
> for another database for DX stns and cities. Any help
> greatly appreciated. The ARRL database for countries and
> center of each is not enough. New ATLAS books do not have
> the long-lat data anymore. Have you noticed. A rare/expensive
> find if you do run across one. I haven't found
> one that I want to spend the money on yet.
```

```
>  
> Chuck Adams K5FO CP-60  
> adams@sgi.com  
>
```

One source of this information, at least for U.S. cities can be found on the internet through:

```
telnet martini.eecs.umich.edu 3000
```

This has lat/long information for almost anyplace in the U.S. and so is good for miles(or km)/watt, grid squares,etc.

Mark C. Oswood KD1PX oswood@psun.chem.yale.edu
or moswood@biomed.bitnet

From qrp-admin@Think.COM Tue Feb 22 15:45:37 1994
Date: Tue, 22 Feb 94 15:45:26 -0500
From: jrj@mbunix.mitre.org (Johns)
Subject: MFJ 9420 QRP SSB Rig

Just got off the phone with MFJ. The 9420 has a lead time of 4 to 6 weeks ARO (after receipt of order). They will have the rig on display at Dayton. I spoke with a technician about the errors in the schematic and he said that they had a few of the rigs out for evaluation with some hams and that the responses were good. (Of course he works for MFJ :-). You can contact MFJ for a copy of the manual or more info on the rig. 601-323-5869

Note: I have no association with MFJ other than as an interested consumer.

Jim Johns KA0IQT
jrjohns@mitre.org

From qrp-admin@Think.COM Mon Feb 28 00:03:14 1994
Date: Sun, 27 Feb 94 21:03:02 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: MFJ SSB XCVR

OK boys and girls,

In the March 1994 QST, page 157 is a new advertisement from MFJ.

At the top center is the new MFJ SSB XCVR, MFJ-9420 for \$219.95 or MFJ-9420X for \$229.95.

It's 2.5 x 6.5 x 6 inches (we apologize to the rest of the world, as the USA still is holding to the non-metric system).

12 "powerful" watts to work the world. the ad does not say whether this is PEP or RMS.

Either way it's in violation of the definition of the 10W PEP limit for qualification
for QRP ARCI awards.

You get high performance superhet receiver, razor sharp crystal filter, sensitivity down
to noise, smooth vernier drive VFO, one watt of audio, speaker, "real" S-Meter, rugged
transmitter, 14.150-14.350 MHz coverage and low current drain.

Plug-in MFJ-415 module, \$39.95, and operate CW, 14.000-14.100 MHz. Has semi-breakin, sidetone, key jack, CW/SSB switch.

The 9420X includes the microphone, thus the extra 10 bucks (US) for the price.

Whoever gets the first one, give us a report. Also photocopy the schematics and ship me a copy. :-) It'll be interesting to see how they do it. Watch out for the clones to follow. Kit-ville USA.

I got too much to do on CW, so you won't see me doing SSB anytime soon. :-)

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Sat Feb 19 15:13:19 1994
Date: Sat, 19 Feb 94 15:13:01 -0500
From: jrj@mbunix.mitre.org (Johns)
Subject: MFJ-9420 Manual

In today's mail I received a copy of the manual for the new MFJ 9420 20 Meter SSB Travel Radio. I had requested a copy several months ago when the ad first appeared in QST. On first look the manual is similar in format and style to the manuals supplied with the 9020/9040 CW rigs made by MFJ. The technical specs read as:

Receiver Section:

Frequency Coverage: 14.150-14.350 MHz (14.000-14.100 with CW adapter module)
Receiver Type: Single conversion superhet
VFO Frequency: 4.150-4.350 MHz (4.000-4.100 with CW adapter module)
IF Frequency: 10 MHz
IF Selectivity: -6 dB at 2.5 KHz
AGC: Audio-derived
Sensitivity: <.5 uV for 12 dB S/N
Audio: >1 Watt into 8 Ohms at 10% THD
Receive Current: 50-100 mA typical

Transmitter Section:

RF Power Output: 10 W Average Speech (8-10W CW with CW adapter module)
VSWR Tolerance: 3:1 VSWR
Maximum Current: 2.2 Amps peak at 13.8 VDC

Audio Enhancement: RF-compression processor

The manual contains a block diagram, theory of operation, operating instructions, antenna advice, an in case of trouble check list, a schematic with parts list, component layout and a list of internal adjustment locations. The troubleshooting guide has space for typical voltage readings but that section hasn't been completed yet. According to the manual the unit has a 12 Month warranty.

Looking at the schematic, the top half looks a lot like the receiver found in the 9020/9040 CW rigs. The transmitter side appears to have a few drafting errors, with the input of U6 (an NE602) shown as shorted as is the carrier balance control shown as shorted. I suspect the schematic would be updated before they ship these rigs. The rig uses MRF-477 as a final amp. According to the manual, there is no protection for the final and I don't see anything in the schematic that would protect the final transistor.

It should be interesting to see one of these rigs in action. There was no letter or note enclosed with the manual so I don't know when these rigs are scheduled to hit the market.

I have no connection with MFJ and any errors in transcribing the features or specifications of this rig are mine and not my employer's. (There - that takes care of the legal issues!) If anyone would like some more information out of the manual I'd be happy to provide it or you can contact MFJ for your own copy of the manual.

73 & 72

Jim Johns KA0IQT
jrjohns@mitre.org

From qrp-admin@Think.COM Tue Feb 22 10:47:03 1994
Date: Tue, 22 Feb 1994 09:46:09 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: MFJs

> From: IN%"tjf@beta.lanl.gov" 22-FEB-1994 09:21:49.03
> To: IN%"qrp@Think.COM"
> CC:
> Subj: 30mW from New Orleans!
>
> I'm going to do more on 30m!
>
> BTW the MFJ9030 drifts a lot more than my 9020 does. The 9030 is newer

> (has the quieter relay and better audio), but the 9020 seems much less
> prone to drift. On the QSO above, I had to adjust the dial an estimated
> 2 Khz over the 10 minutes we worked. Maybe it was just colder in my shack
> that day, but I almost never have to adjust the 9020 during a QSO!
>
> Tom
> KJ5LT

I find that when 30m is feeling good, it is a very nice band to operate on. The people who work it seem to be much more into ragchewing than exchanging signal reports.. I really enjoy it. I built the 30m mfj from parts and find it works great .. but if it is cold in the shack.. it drifts.. I did one of the audio mods on it..and have enough audio.. I like it.

72

Jeff, AC4HF

PS.. still playing around with the Ten Tec Century 22.. can't believe how well it works for a DC rec. Have the Tejas Curtis keyer and the WBL VSL XS single paddle key hooked to it. I guess I have been using it alot because I really love the key... especially the smooth wood paddle it uses. It is about the most sensitive paddle I have come across.. seems real accurate.

From qrp-admin@Think.COM Fri Mar 4 15:10:39 1994
Date: 05 Mar 1994 01:46:01 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Mods for ARK 20/30/40

Hi,

Here's what I did to my ARK 20 for better performance:-

- 1) Changed R70 to 100k to reduce volume of sidetone oscillator which is a little too loud and tends to drain battery.
- 2) Changed R74 to 51 ohms for better audio gain.
- 3) Changed R72 to 3.3k for better volume control dynamic range.
- 4) Inserted a 22 ohm resistor between pin 6 of the LM386 audio amp and +12v so that its not over-driven and mains hum is less audible. Also reduce current drain. Cut track on component side and add this.
- 5) Changed C75 to 2.2 uF for faster AGC response.

Here's what else I want to do:-

- 1) Add a noise blanker or limiter circuit.
- 2) Maybe add a power LED?
- 3) Cut down audio stage noise.

Any help from the net?

72 es 73 de Daniel

From qrp-admin@Think.COM Sun Feb 20 19:02:29 1994
Date: Sun, 20 Feb 1994 15:55:41 -0800
From: ROHRWERK@holonet.net
Subject: muting

On 02-18-94, mvjfm@mvubr.att.com wrote to QRP@Think.COM:

>-----

I dont know about muting an ICOM, but I thought of using my
Ten Tec Argosy as a receiver with a home brew transmitter
or transceiver to provide split frequency operation.
(RCV on 1 freq., XMT on another)

I would use the ARGOSY to receive and the NorCal-40 to transmit
and key both the NorCal and the Argosy at the same time.
The Argosy would be turned down to 0 watts out, and only the
NorCal would send a signal to the antenna. Both rigs would be
connected to the same antenna.

You would be able to listen to both frequencies at the same time
but just transmit on the NorCal frequency with the key down.

I have not tried it, as the idea does not sound too sound, but what
if it works ? The Argosy may just act like a big dummy load,
but if I had the chance to work the 3Y0 station, which was running
split, on 40 meters, I would have tried it.

73/72 Jim Fitton, W1FMR QRP-NE mvjfm@mvubr.att.com

>-----

You DEFINITELY need a TR switch of some kind, even the back-to-back diode
protection setup.

When I built up my first QRP rig (5W, kludged together from various building blocks in the literature), I just keyed the Argosy and the rig together. You DO need an isolating diode in the line to the Argosy. By the way, the key line and PTT line are one and the same, so I could just clip-lead it into the mike plug!

Why not try the reverse? Feed the other RX from the Argosy's diode TR switch? (If you disable the little transceiver's TX!) I have 4 connections brought out to the rear panel phono plugs for transverters. I fed a Drake 2B from the Argosy's TR switch output once. I guess you could split the output with a transformer splitter if you were really finicky about receiver-to-receiver isolation and impedance matching.

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Sun Feb 20 20:40:56 1994

Date: Sun, 20 Feb 94 17:39:25 PST

From: dh@deneb.csustan.edu (Doug Hendricks)

Subject: NC40 MOD

I just finished one of the easiest mods to make on the NorCal 40, and it really adds to the mechanical stability of the unit. Terry Young, KC6SOC, came up with the original idea, I just changed it a little.

The front and back panels of the NC40 case are attached to the circuit board with the controls. The back panel is really stable, but the front one tends to wobble just a little. Terry's fix was to put a piece of 1/4" rod from the middle top of the front panel to the middle top of the back panel, sort of a reinforcement bar. I liked the stability, but I did not like the fact that the bar was in the way when you took the top off, and also, I plan on adding the Jim Pepper digital readout, and the bar would be in the way on the top. I thought about putting one in each top corner, but the easiest way was to put the bar on the bottom of the case, underneath the circuit board. It was easy, all that it takes is a piece of 1/4 inch rod, two 4-40 x 1/4 inch pan head screws, a hack saw, file or sander, drill and #43 drill bit, 7/64" drill bit, and a 4-40 tap.

Jim Cates, WA6GER, picked the rod up for me in Sacramento, he was able to get aluminum 1/4" rod a lot easier than I can here in Dos Palos. I measured the depth of the circuit board from front to back, and found it to be exactly 4.25". Note, be sure to measure your board, and add 1/8" to the length. I then cut the rod into a piece that was 4 3/8" long with a hack saw, and used a file to square the ends. I then put it on my electric disc sander

and got the ends perfectly square and cut to length. Next, I used a center punch to mark the center of the rod on each end, and used my drill press and #43 bit to drill a hole about 1/2" deep. It was then a simple matter to tap the holes for 4-40 threads and the bar was done.

I found the center of my panels to be 2.25" and measured up .25" and marked the spot with the center punch. I then drilled a 7/64" hole in both panels. Assembly is easy, and when you get finished, the case is much sturdier. Oh, be sure to check that the bar does not short out any of the leads on the bottom of the board. I had to trim the leads on the RIT pot to get enough clearance.

Thanks to Terry Young for the original idea, and thanks to Jim Cates for the aluminum rod. (He made me promise to make him a couple of the rods, so I will have to pay him off, never know when I will need more supplies.)

72, Doug KI6DS

From qrp-admin@Think.COM Tue Feb 22 01:06:05 1994
Date: Mon, 21 Feb 94 22:04:27 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: NC40 Output

I spent the day today with ham radio and I had a blast. Bob Warmke, W6CYX and I are building beta rigs of the Sierra, the NorCal QRP Club's next club project, which is an all band cw transceiver using plug in band modules designed by Wayne Burdick, N6KR. I had several parts that Bob needed, and he had the bottom to my case, so I drove over to San Jose and visited Bob.

We exchanged parts, and while I was there, I watched as Bob did 3 simple mods to my NorCal 40. He increased the coverage of the VFO from 38 KHz to 144 KHz by putting in a 10 turn pot and a capacitor, he improved the keying shape by changing two capacitors, and he increased the power by changing yet another capacitor. The unique part of all this was that Bob did the mods with a soldering iron, solder wick, and a general coverage digital receiver, I think it was a Kenwood 850. That is it.

He calibrated the rig by hooking the NorCal to an antenna, and unplugging the antenna to the Kenwood. Then, he keyed the NorCal and found it on the receiver of the Kenwood. He adjusted the variable capacitor on the vfo set, and put it right on 7.000 MHz. Then, he tuned to the top of the vfo range and found it on the receiver. It was at 7.144, which was good enough for me. He then put the rig in the mid range of its tuning range, 7.072 KHz, and adjusted the trim caps for the receiver and the trim pot for the transmitter.

That was it, no test equipment, just a wattmeter and receiver, and Bob had my NorCal up to snuff. His watt meter said 4 watts, and I didn't believe it, so when I got home, I decided to measure it myself.

I recently bought a good used Tektronics 465 Scope (Don't mention it to my wife), and now this was the way to use it. Bob told me that I could use the scope to measure the peak to peak voltage, and then figure out the RMS

voltage and the power. I bought four 200 ohm 2 watt resistors and made a dummy load by soldering them together in parallel. You do remember that part of your Novice theory? This made a dummy load capable of handling 8 watts, with a measured resistance of 51 ohms. I used carbon resistors, and not the new type. Now that I have a dummy load, I was ready to go. Hooked up the NorCal to 12 volts, and took the 10X probe and the ground went to the sleeve of the S0239, and the probe tip went to the center conductor. Then I keyed the rig and looked at the scope. Ooops, should have been a sine wave, and it was a wide solid line. Hmn, call Wayne, and ask for help. Wayne told me that I had the scope display set wrong. These are the settings that worked. Time/division was set at .05 microseconds, and volts per division was set at 1. Tried it again! Success, beautiful sine wave, and the peak to peak measurement was 3.7. Wayne was on the phone with me, and said that means that it was 37 volts peak to peak, since I was using a 10X probe. I then divided 37 by 2.8 to get the RMS voltage, which was 13.21 volts. I then squared the RMS voltage, 13.21 and got 174.5. Since my resistance was 51 ohms, I divided 174.5 by 51 and discovered that my NorCal 40 is putting out 3.42 watts. I am excited! I learned something today. Thankyou to Bob and Wayne, but I learned!!! None of this would have happened if I was not working with building my own gear. Ham radio is great!! Now all of those formulas that I "learned" are starting to mean something. Jeff Gold is absolutely right. Build and you will learn. Get a scope, and you will really learn. Have a good day, and 72. Doug, KI6DS

By the way, full details of Bob's mods and others are in the next issue of QRPp, to be mailed before March 1.

From qrp-admin@Think.COM Fri Feb 25 11:20:18 1994
Date: 26 Feb 1994 00:15:25 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Need a Favor

Hi Guys,

I need a favor in about 2 hours time. Actually I need someone to call up S & S Engineering to check whether my ARK 20 is shipping UPS yet, when its due to arrive and its tracking number. I would sooner call them myself but my phone bill last month was astronomical from calling US from 9V land and my XYL isn't exactly rejoicing over that. If anyone can do me that favor I'd be most thankful.

I would also like to know when they shipped it and when its due to arrive. When I last called them, they said Thursday but it didn't get here yet so I'm a little anxious and stressed from running down to the mailbox every hour.

Please reply soon, before I hit the sack.

I'll give you the relevant info.... tks.

73 de 9V Daniel

From qrp-admin@Think.COM Thu Mar 3 01:36:34 1994
Date: Wed, 2 Mar 94 22:35:24 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Need Murata Filters

Can someone on the net tell me a source and a price for the following Murata filters? If I can find a source for the filters, I will have an article for a SSB QRP transceiver. But, the rig requires one of these filters. Any help would be appreciated.

1. 9 element ceramic filter Murata CFM455J6
2. Murata CFM455I
3. 11 element Murata CFR455J
4. 11 element Murata CFJ455K12

Thanks in advance. 72, Doug, KI6DS

P.S. I am not writing the article, it has been submitted in rough draft form, but will only be written if a source for the filters can be found.

From qrp-admin@Think.COM Fri Feb 25 12:56:30 1994
From: mvjfm@mvubr.att.com
Date: Fri, 25 Feb 94 10:41 EST
Subject: NEN

Gang,
Dont forget to check into NEN at 1300Z (8 am EDT)
tomorrow.....Saturday morning, on 7.038 mHz
using urcall/inet KR1S/inet etc.....

NCS WA1JXR (K3TKS alternate NCS)

They will be looking for the /inet.....

West coasters can check in if they are swift enough
and use this QSP technique.

Start listening exactly at 1300Z and until you hear the W8s, W9s, and W0s checking in. It helps if you know the callsigns of some of the mid-west check-ins.

QNZ - zero beat the frequency of the station you can hear and then send "QSP QSP" immediately after they stop sending.
When they send QSP ? , send your call a few times /inet.....) and look for some acknowledgement (QSL).
If you do not get a QSL within a few minutes, be aggressive and QSP until someone responds and then gives you a QSL.

You may be very fortunate and be able to hear the NCS. Folks have checked in from the Dakotas and further west directly.

See you tomorrow....

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

PS.

Paula, WB9TBU had a "grand slam" once, and is the only one known to have done it:
She checked into every ARCI NET during a 1 week period.

From qrp-admin@Think.COM Mon Feb 28 20:59:24 1994
From: mvjf@mvubr.att.com
Date: Mon, 28 Feb 94 20:33 EST
Subject: NEN

Paul, W1CFI

When you talk to Greg, WA1JXR would you please tell him that 3 people from W5 land and 1 from W7 land tried to check into NEN Net on Saturday morning with no luck. (Internet info.)

Would you ask him to have a W4 station call CQ NEN, around 1320Z ?
(To pick up the W5/inet stations)

Would you also ask him to have a W8 or W9 call CQ NEN around 1330Z ?
(To pick up the W6 & W7/inet stations)

They/we will be listening on 7.038 +/- QRM.

I tried to tell him this on Sat. morning but the skip was so long at 8 a.m. that I could barely copy him. But by 9 a.m., he was RST 599 .

Thanks,

72, Jim W1FMR

From qrp-admin@Think.COM Wed Mar 2 07:56:53 1994
From: mvjfm@mvubr.att.com
Date: Wed, 2 Mar 94 07:49 EST
Subject: NEN Net

Jim, KA0IQT

FYI.... My rigs are an analog Argosy or a NorCal-40.
The calibration must be off, especially on Sat. mornings.....

Thanks..... 72/73

W1FMR

Jim W1FMR - Just a note about the NEN frequency you have been
posting for the
/inet group. Based on the digital display of my TS940 the NEN has been
operating at 7040 +/- QRM and was closer to 7041 last week. If someone
has a synthesized rig and hangs around 7038 they could completely
miss the net. (I know as I spent about 15 min looking around 7038 before
I jumped up to 7041. I will admit that I had the filters cranked real
narrow however so I had to be right on to locate the net) Just a thought.
73 & 72 Jim KA0IQT

From qrp-admin@Think.COM Thu Mar 3 21:36:11 1994
From: mvjfm@mvubr.att.com
Date: Thu, 3 Mar 94 21:13 EST
Subject: NEN Net

Don't forget !

CW net Sat. a.m. at 1300Z (8 a.m. EDT) on 7.040 +/- QRM
NCS - WA1JXR from MA, is primed this week for stations from
W5 and W7 land. Use "QSP" assertively !!
The gang really wants to hear you!
Also use /inet so we can recognize you. ie....KR1S/inet

Another excellent QRP net is held on Wed. eve. 9 p.m. EDT, or 0200Z run by (famous) Dave, NN1G from CT, on 3.560 +/- QRM. Last night the net (called GLN - Great Lakes Net :) was a bit noisy but QRM free. A few weeks ago a DL4xxx checked in !!

72 Jim, W1FMR from NH

From qrp-admin@Think.COM Mon Feb 21 10:25:21 1994
From: mvjfm@mvubr.att.com
Date: Mon, 21 Feb 94 10:05 EST
Subject: NET +

The NEN Net was a wash-out Sat. a.m. because of the DX contest.
Next week gang.....
Sat. 0100Z 7.038 MHz use URCALL/INET to check in. ie...W1FW/INET

I am so excited I could hardly sleep last night after this event.....

Waited for my daughter to come home from a night out.....~1:30 am, and before going to bed, I turned on the NorCal-40.

Heard JH2AG (Japan) about RST 549, working stations and listening UP 2 kHz.

Within 5 minutes I worked him with the NC-40, (2Watts) Here's how :

NorCal-40 rig: on ~7.010 - Extra Class portion of 40m.

(UP 2)

Turn the RIT switch to "ON"

Turn the RIT control fully CCW

Tune the main tuning knob until you hear the DX stn. JH2AG

Confirming clues:

Turn the RIT switch "OFF".....Hear the pile-up calling DX station.

Turn RIT switch "ON".....Hear DX station talking to pile-up.

Leave RIT on.

This technique provides ~ 2 kHz split xmt/rcv operation....The limit of the RIT adjustment.

Leave RIT on. Here is the exchange:

(I apologize for this, to experienced operators, but many questions seem to be asked by new operators)

DX...TU
 ME.... W1FMR W1FMR
 DX... DM7OVJ 5NN K (5NN = RST 599, a standard contest reply)
 DX...TU (Thank You)
 ME.... W1FMR W1FMR
 DX... G3BYY 5NN K (Darn !! QRO Limey)
 DX...TU
 ME.... W1FMR W1FMR
 DX... ZL2AMO 5NN K (Darn !! Ron Wright QRO from New Zealand)
 DX...TU
 ME.... W1FMR W1FMR
 DX... W1 ?? (Ooohmy God, can it be me ? please please!)
 ME.... W1FMR W1FMR
 DX... W1MR ?? (It's me It's me It's me Ooooh !!)
 ME.... W1FMR W1FMR W1FMR k
 DX... W1FMR 5NN (Yeoooow ...wake up the neighbors !!!)
 ME.... 5NN 5NN 2W 2W QRP QRP k (Im having a heart attack)
 DX... (pause) R R FB QRP TU
 ME... TU TU TU TU TU (Thank You ! Thank You ! Thank You !)
 DX... TU JH2EK
 Me.... (Move up 2 khz) ZL1AMO ZL1AMO X10 de W1FMR....No reply.....
 Me.... ZL1AMO ZL1AMO X10 de W1FMR....No reply.....
 Me.... (ZL1AMO ZL1AMO X10No reply.....
 Me..... (Darn forgot to turn the RIT switch off !!!!!!!)
 Me.... ARGHHHHH!!!! He might have been tuning and heard me.....

Stare at the wall the rest of the night.....

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

From qrp-admin@Think.COM Mon Feb 21 12:56:29 1994
 From: mvjf@mvubr.att.com
 Date: Mon, 21 Feb 94 11:59 EST
 Subject: Re: NET +

Pete,

OOPS!!!!

NEN Net is on Saturday Morning..... 8 a.m. New england time ,
 1300 UTC, 7.038 mHz (up all night - HI !)

Thanks for correction !!!!

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com
h

From qrp-admin@Think.COM Mon Feb 28 09:12:16 1994
Date: Mon, 28 Feb 94 07:13:19 -0700
From: tjf@beta.lanl.gov (Tom J Farish)
Subject: New Country on 15m / 5W

Howdy...worked Luis in Dominican Republic yesterday on 5W. First for me in DR and first for him in New Mexico! Interestingly enough, I had heard him on SSB earlier in the day about an S1. In the PM, conditions must have improved as he was 559 fading to 519 with QSB. Got a solid 559 from him also with report of QSB. I've worked Haiti on 20m, but I've never seemed to be able to get the DR before. Go figure.

Tom
KJ5LT

From qrp-admin@Think.COM Wed Feb 23 17:19:11 1994
Date: Wed, 23 Feb 1994 12:53:36 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: nn1g...and other superhet designs.

Has anybody considered using the Receiver mixer NE602 for the transmit mixer as well, and just provide something like a twin t oscillator for sidetone?

I started thinking about it, and that might work, if I could figure out how to switch the circuitry change over from rx to tx then back.

Maybe a dumb idea, but it seems like those darn ne-602's are the most expensive part on the board.

Maybe this has been done in other designs not incorporating the NE-602? It would probably be easier with SBL-1 designs, because then you couldn't have to switch the oscillator of the ne-602.

Oh well, sorry for thinking aloud..
73 Brad

From qrp-admin@Think.COM Mon Feb 28 11:59:38 1994
Date: Mon, 28 Feb 94 08:48:38 PST
From: GroverC@gvgadg.gvg.tek.com (Grover Cleveland)
Subject: Norcal "Thump" - normal?

My Norcal has a low frequency "thump" when keying. Is this normal and, if so, is there a cure?

73,

Grover, WT6P

(Preserve the Mother Tongue - fie on "72" lidisms)

From qrp-admin@Think.COM Mon Feb 28 15:37:32 1994
Date: Mon, 28 Feb 94 08:48:38 PST
From: GroverC@gvgadg.gvg.tek.com (Grover Cleveland)
Subject: Norcal "Thump" - normal?

My Norcal has a low frequency "thump" when keying. Is this normal and, if so, is there a cure?

73,

Grover, WT6P

(Preserve the Mother Tongue - fie on "72" lidisms)

From qrp-admin@Think.COM Mon Feb 28 17:08:14 1994
Date: Mon, 28 Feb 1994 14:07:56 -0800 (PST)
From: Stephen Lee <slee@u.washington.edu>
Subject: Re: Norcal "Thump" - normal?

Perhaps it would be possible to incorporate an audio filter that completely eliminates low frequencies...say those below 100 Hz.

There is a mod that probably is getting published in the latest issue of QRPp that may affect that thumping noise. Replace R6 with a 15Mohm resistor (mine measured 16Mohm) and replace C29 with a 1uF non-polarized electrolytic capacitor. After having tested several values for R6 and C29, I finally settled on using the parts which were included with my kit (from the second run). There were two effects from this mod. The first is the level of AGC intervention and the second is that thump sound when using the key. My belief is that with a 15Mohm resistor for R6, the AGC action is minimized. Less of the thump is heard when using the 1uF capacitor for C29. A slight thump can still be heard if I pay attention to it. Is Q1 partly responsible????

I built the audio notch circuit from QRPp, Vol.1, No.3, Dec.1993. As time permits, it will be tested with my NorCal 40. Like the article claims, the notch circuit is really peaky. Anyone else out there build this circuit???

I built an audio amplifier using 1/4th of an LM324 which exhibited far less noise than the LM386. I'll look for an 8-pin LM324 equivalent and see what I can do with that.

Take care, folks...
Stephen Lee
KC7AVB

On Mon, 28 Feb 1994, Grover Cleveland wrote:

> My Norcal has a low frequency "thump" when keying. Is this
> normal and, if so, is there a cure?
>
> 73,
>
> Grover, WT6P
>
> (Preserve the Mother Tongue - fie on "72" lidisms)
>
>

From qrp-admin@Think.COM Tue Feb 22 11:29:25 1994
Date: Tue, 22 Feb 1994 08:15:05 -0800
From: cleveland@gvg47.gvg.tek.com (Grover Cleveland)
Subject: Norcal 40 in the dx contest

Hi Gang,

I thought you might like a brief report on the Norcal in the dx contest this past weekend.

I finished it Friday evening and it came up without smoke. Plugged it into my Windom and tweaked on a weak signal as suggested. Hmmmmmm. Who was that weak signal anyway? A ZL! Ok, let's try it. Bingo - "599 200w" was the report. In the next half hour I picked up VK, P40, JA, KA6, XE, VE, KH6 and others. That's right - in a half hour right "out of the box" with the Norcal. Very impressive little radio. Now I know that the upcoming Norcal-does-Africa trip will be a success.

Sure looking forward to the "Sierra".

73

Grover, WT6P

(Preserve the Mother Tongue - fie on "72" silliness.)

From qrp-admin@Think.COM Fri Feb 25 11:57:23 1994
Date: Fri, 25 Feb 94 09:57:01 MST
From: kub@upl.com (Steve Kubisch)
Subject: NORCAL-40 Arrives

Well, my daily trips to the mailbox are over. The NorCal-40 arrived. I looked over the manual and the parts and was impressed. Now if I can find the time to get it built and on the air. Of course my XYL has picked this time to remodel our kitchen, so soldering and operating time are at a premium.

Thanks to Jim and the rest of the guys at NorCal.

Steve

73 de WW7Y

From qrp-admin@Think.COM Tue Mar 1 01:49:40 1994
Date: Mon, 28 Feb 94 22:48:33 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Operating the Sierra

Operating the Sierra for the past 2 days has been a blast. I have made 11 contacts, and I called CQ or was called on all of them. The rig sounds really good, and the receiver is hot. I am not having any trouble getting contacts by calling CQ, even though the rig puts out 3 watts. (Measured with my Tektronics 465 scope). Here is a copy of my log.

All Qso's are on 40 meters as that is the only band module that I have now. Times are in UTC.

Date	Time	Station	Sent	Rec'd	Name & QTH
2/27	20:20 - 20:35	N6SC/QRP	579	579	Spence, San Rafael, CA
2/27	21:30 - 21:45	WA6MCL	579	559	Vic, Palmdale, CA
2/27	21:48 - 22:13	WA6LRY	599	589	Rich, Tulare, CA
2/27	22:13 - 22:16	W6CYX	579	589	Bob, San Jose, CA
2/27	22:16 - 22:34	N6JUG/mobile	559	559	Jim, San Francisco, CA
2/28	04:45 - 04:50	W3RU	579	339	Elizabeth, PA
2/28	06:00 - 06:05	WA2NAV	559	579	Steve, Morgantown, WV
2/28	07:17 - 07:27	W0VBD	579	569	Roger, Mankato, MN
3/1	02:25 - 02:41	KB7AZQ	599	579	Roger, Tacoma, WA
3/1	04:40 - 05:03	NU0N	579	479	John, Ottawa, KS

So you can see that I worked 6 states, had several nice rag chews, and all were complimentary about the rig. The antenna here is a Skelton Cone that is up 35 feet at the apex, and the legs are 10 feet off the ground. Nothing fancy, just an average installation. By the way, the MFJ 971 tuner is almost exactly the same size as the Sierra and they make a good match.

CUL,
72, Doug

From qrp-admin@Think.COM Wed Feb 23 19:16:57 1994
From: mvjfm@mvubr.att.com
Date: Wed, 23 Feb 94 17:12 EST
Subject: Ouch !

ARGHHHH!
I feel like such a dop.
The station I was so excited about was not JH2AG, but J52AG !!
I thought it was too good to be true.

Thanks to Fred Cady from Montana for the info....

73/72 Jim, W1FMR

From qrp-admin@Think.COM Thu Feb 24 11:16:05 1994
Date: Thu, 24 Feb 94 10:07 EST
From: Paul Ermisch <0003167728@mcimail.com>
Subject: Parts supplier addresses

Two requests from a new ham:

1. For the benefit of a new kit builder/homebrewer, could somebody please post addresses and phone numbers for Digikey, Mouser, etc.? I've been able to find a few of the mail-order parts houses in the usual magazines, but I'd like to know who you more experienced folks rely on. Of course, my first choice would be local outlets but it's nice to have the backup.
2. I'd appreciate any comments regarding a UK company called Cirkit. I just received a parts/kits catalog from them -- haven't seen such a wide selection of kits since the Heathkit catalogs of my youth. I'd certainly look for closer-to-home suppliers first but the catalog's apparent high quality (presentation, supplies, kits) is intriguing.

BTW, I just received two items in the mail. My ticket (KB0LUR, ya!!) and the 1W XCVR kit from 624 Kits. Casual perusal of the silkscreened PCB revealed one undrilled pad. There were also some missing parts which

624 called me on before I even got the package. The instructions look easy to follow and I'm looking forward to building this for 80 meters. I should also very soon receive an ATU kit from Lake Electronics (UK) and a NorCal 40.

Paul Ermisch, KB0LUR
permisch@mcimail.com

From qrp-admin@Think.COM Thu Feb 24 12:00:02 1994
Date: Thu, 24 Feb 94 12:00:36 EST
From: jfw@ksr.com (John F. Woods)
Subject: Parts Supplier Addresses

Paul Ermisch asked for parts suppliers. I was about to mail my 24KB "Mail Order Suppliers List" to the list in general, but remembered that some people here pay for their email. I've just posted it to rec.radio.amateur.{homebrew,misc}, rec.radio.info, and sci.electronics; if anyone here doesn't read those USENET groups, send me email and I'll email it individually (or if there's a great groundswell of support and no impassioned pleas for restraint, I'll send it to the list after all). (Updates or changes are most welcome, too!)

73, John, WB7EEL

From qrp-admin@Think.COM Thu Feb 24 14:01:30 1994
Date: Thu, 24 Feb 94 13:57:28 EST
From: N100Q Tom R. @ MR01 24-Feb-1994 1342 <randolph@est.enet.dec.com>
Subject: re: Parts supplier addresses

Mouser Electronics
2401 Hwy. 287 N
Mansfield, TX 76063
800 346 6873

Digi Key Corp
701 Brooks Ave. S.
PO Box 677
Theif River Falls, MN 56701-0677
800 344 4539

Circuit Specialists
PO Box 3047
Scottsdale, AZ 85271
800 528 1417

Amidon Assoc, Inc

12033 Otsego St.
N. Hollywood, CA 91607
818 760 4429

These are the ones I've used so far. Circuit Specialists has some toroids at much cheaper prices than Amidon. Amidon just got my order for the rest. Most of the transistors used in W1FB's QRP Notebook can be found at Mouser or Ckt Spec. Digi-Key's prices are a little higher, so I only buy from them what no one else has. Some stuff requires scrounging... air variable caps apparently aren't widely sold anymore, but I can get all I need at local ham fleas. All of the above will send you a catalog if requested by phone. Another good source that I don't have an address handy for is "RF Parts" of CA. They have an ad in every second or third QST. They sell many, many rf transistors, tubes, and power modules.

-Tom R. N100Q randolph@est.enet.dec.com

From qrp-admin@Think.COM Thu Feb 24 14:23:38 1994
Date: Thu, 24 Feb 94 9:23:26 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: Re: Parts supplier addresses

Paul and the Gang,

the ARRL email server has a great list of kit manufacturers and their address. Do this: send an email to info@arrl.org and in the text only write:

HELP

INDEX

and what you'll get back in a few hours will be the instructions on how to use the server, and an index of all the files. The file you want to look for is something like KITS or KIT.MAKERS or something like that - I believe there were at least two files concerning kits.

73,
Jeff

=====

Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRPp transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)
NMC6 (U.S. Coast Guard Group Monterey)

It is said that CW is the second most popular mode on HF, but scanning the bands I frequently count more CW QSOs than SSB QSOs.

=====

From qrp-admin@Think.COM Thu Feb 24 20:27:58 1994
From: Stephen Trier <sct@po.cwru.edu>
Date: 25 Feb 1994 01:27:39 GMT

Subject: Re: Parts supplier addresses

> the ARRL email server has a great list of kit manufacturers and their
> address.

For those who are on the Internet, all of the files on the ARRL server
are also available by gopher and FTP from world.std.com.

Stephen

--

Stephen Trier	"Socrates was a famous Greek teacher who went
sct@po.cwru.edu	around giving people advice. They killed him."
KB8PWA	- Anonymous, quoted by Richard Lederer

From qrp-admin@Think.COM Thu Feb 24 17:24:21 1994
From: wylz@netcom.com (Scott Ehrlich)
Subject: RE: Parts supplier addresses (fwd)
Date: Thu, 24 Feb 1994 14:24:52 -0800 (PST)

> the ARRL email server has a great list of kit manufacturers and their
> address. Do this: send an email to info@arrl.org and in the text only
> write:
> HELP
> INDEX
> and what you'll get back in a few hours will be the instructions on how to
> use the server, and an index of all the files. The file you want to
> look for is something like KITS or KIT.MAKERS sor something like that -
> I believe there were at least two files concerning kits.
>

Greetings to all!

FYI: For those with FTP capability, you can anonymously FTP into: ftp.std.com
Change directory to: pub/hamradio/ARRL/Server-files/info

It is a complete mirror of the files also available via e-mail from the
info-server at the ARRL.

The FTP area on World (ftp.std.com) is sponsored by the Boston Amateur
Radio Club.

> 73,
> Jeff
> =====

> Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes
> old TV sets to make QRPp transmitters (CW of course).
>
> Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)
> NMC6 (U.S. Coast Guard Group Monterey)
>
> It is said that CW is the second most popular mode on HF, but scanning the
> bands I frequently count more CW QSOs than SSB QSOs.
> =====

```
=====
| Scott Ehrlich           Internet: wy1z@neu.edu       BITNET: wy1z@NUHUB   |
| Amateur Radio: wy1z      AX.25: wy1z@klugm.ma.usa.na |
|-----|
| Maintainer of the Boston Amateur Radio Club hamradio FTP area on |
| the World - ftp.std.com pub/hamradio |
=====
```

From qrp-admin@Think.COM Thu Mar 3 13:24:07 1994
Date: Thu, 3 Mar 94 10:30:07 PST
From: Mike J Pulley <Mike_J_Pulley@ccm.hf.intel.com>
Subject: Q: What is "72"?

Text item: Text_1

I realize most others must already know The Secret, but please
bring a new QRPer up to speed. I've been hamming for 22 years
and never encountered "72". What does it mean? Is it a low
power version of "73"?

Also, I notice some of the correspondents here associate numbers
with their names. EX: Daniel always signs "9V Daniel". What am
I missing, Daniel?

-- Mike, WB4ZKA

From qrp-admin@Think.COM Fri Feb 25 10:44:00 1994
Date: Fri, 25 Feb 94 10:41:42 EST
From: skitch@NADC.NADC.NAVY.MIL (M. Squicciarini)
Subject: QQ

Have the QRP Quarterly been mailed yet ?? I have not received
mine yet and wonder if there is a delay?

73 -- marty -- nr3z skitch@nadc.navy.mil

From qrp-admin@Think.COM Fri Feb 25 19:38:25 1994
Date: Fri, 25 Feb 94 16:43:43 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.hf.intel.com>
Subject: Re: QQ

Received my January copy over a week ago.

de W07T/QRP

----- Reply Separator -----
Subject: QQ
Author: qrp-admin@Think.COM at Internet_Gateway
Date: 2/25/94 8:15 AM

Have the QRP Quarterly been mailed yet ?? I have not received mine yet and wonder if there is a delay?

73 -- marty -- nr3z skitch@nadc.navy.mil

From qrp-admin@Think.COM Tue Feb 22 11:59:39 1994
Date: 22 Feb 94 11:53:09 EST
From: Bob Gobrick WA6ERB <70466.1405@CompuServe.COM>
Subject: QRP & Contests

TO: >INTERNET:qrp@think.com

I got a chuckle out of reading Jim W1FMR's blow by blow on working DX with his new NORCAL 40. It seems that whenever I get finished with a project it lands on Saturday of a contest weekend and I end up doing my "final" alignment with contest stations.

This year I was just about to finish my NORCAL 40 in time for the ARRL DX CW contest this past weekend but lo and behold I was shy a couple of critical parts so drats. Anyway with a big cup of coffee in hand on Saturday morning I turned my old (new) trusty HW-9 on and thought I'd test to see if all the mods that I put in this past year were still glued together. The biggest addition was the xtal CW filter from Paul Levesque (sic and I forgot his call) and the mods from QEX. Well what started out as a light hearted entry running QRP in the contest got me hooked again...

I stuck to the high bands so I didn't need to switch antennas - just used my Cushcraft A3 at 10 meters high. The bands weren't great but 15 was opened to Europe and 10 opened to the Caribbean and South America. So after the HW-9 warmed up enough to stabilize drift (I need to get serious about fixing that) I

began my QRP contest technique of "Hunting and Pouncing, pouncing, pouncing until I snagged a DX station. For the next two days in a half hearted attempt (had to clean the ice off the driveway etc) I worked about 100 DX stations in 40 countries all with 3 watts from the HW-9.

What is really great about all this is that I worked many a kilowatt DX contest station and they gave me the same great signal report (599) as I gave them (599).....hmmmmm. Just goes to show you that 3 watts is as good as 1000 during a contest weekend. Kidding aside a contest weekend (especially DX contests on Sunday) is a good time to test your QRP rig out and improve your operating skills. Why I may even mail in my log for QRP single op from Quebec award.

So my advice is don't stub your nose at contesting QRP until you tried it - it lets you have some fun and maybe at the same time gives you a feeling of accomplishment that your homebrewing and operating skills really do bring results.

Now if I could just learn how to send (recieve) 50 wpm like the "big" boys with those cigars....

72 Bob VE2DRB/WA6ERB

From qrp-admin@Think.COM Fri Mar 4 15:09:58 1994
Date: 05 Mar 1994 00:24:51 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: QRP distance 2 the max!

Hi QRPers,

Does anyone know what is the furthest distance a QSO has ever been made with 5 watts CW?

I also need to know the distance between G4 land and 9V land, any ideas? How many skips is that? Tks.

72 & 73 de Daniel

From qrp-admin@Think.COM Fri Mar 4 16:33:51 1994
From: laurahal@microsoft.com
Subject: RE: QRP distance 2 the max!
Date: Fri, 04 Mar 94 13:31:00 PST

Our friend from Singapore writes:

> Does anyone know what is the furthest distance a QSO has ever been
> made

> with 5 watts CW?

When conditions are favourable you can communicate from anywhere on the planet to anywhere else on the planet with 5 watts. Or less.

> I also need to know the distance between G4 land and 9V land, any
> ideas?
> How many skips is that? Tks.

I just cranked this through MinProp (hint hint...) and came up with London to Singapore distances of 10885 km short-path, 29115 km long-path. With the solar flux around 90 this comes to 4 F-layer hops. According to MinProp 40m around Singapore dawn is a good bet - say, 2200-2300Z. Late afternoon/early evening in Singapore (1100-1400Z) 15 and 20m may be worth a try.

These were my gut feeling guesses; I'm pleased to see MinProp confirm them...MinProp didn't come up with much long-path propagation, but it doesn't seem to take into account mostly-water vs. mostly-land paths. Thus, from my place, it always forecasts good short-path propagation to Europe and indifferent long-path, even though the situation is often the other way around.

73 from Burnaby,
laura VE7LDH

From qrp-admin@Think.COM Fri Mar 4 16:54:48 1994
Date: Fri, 4 Mar 1994 14:56:01 -0700 (MST)
From: B61395@awtims.fe.anlw.anl.gov
Subject: QRP DX 2 MAX

Hi to Daniel and all -- I have heard my own signal from AO-13 with as little as two watts on the uplink (range about 35,000 km), but have never worked anybody that way. My best DX would be Idaho to Western Samoa with an HW-8 and Batternut vertical on 20 meters (about 5000 miles +/-). Have also gotten into eastern Russia on 30 meters with my Oak Hills Sprint on 30 meters (maybe 4000 miles). Both rigs run about 1.5 watts. Hope that info is of some use to you. Where you located???

73, Bill, KR8L, Michigan QRP # M-98, NW QRP # 127.

From qrp-admin@Think.COM Sat Mar 5 04:45:21 1994
From: jjw@seastar.org (John Welch)
Date: Fri Mar 4 09:17:14 1994

Newsgroups: qrp
Path: jjw
From: jjw@seastar.org (John Welch)
Subject: Re: QRP Timewarp

Date: Fri, 4 Mar 1994 15:17:11 GMT
Message-ID: <CM5Bsn.Cs3@seastar.org>
Distribution: local
References: <199403031723.AA01522@hobby1.cba.kodak.com>
Reply-To: jjw@seastar.org (John Welch)
Followup-To: qrp
Organization: Welch Research.
Lines: 37

As quoted from <199403031723.AA01522@hobby1.cba.kodak.com> by nshore!
usenet.INS.CWRU.Edu!CBA.Kodak.COM!bmitchel (Brad Mitchell):

<stuff about lots of neat new rigs deleted>
> I whole heartedly agree! It's amazing the amount of stuff that is out there to
> be built that has already been designed. I would need to take a year or two
> off of work to try out everything that is out there. Now that all this
> creative energy has been established, it would be fun to harness it into a new
> level of communications. How about a spread spectrum cw project so that
> with all the influx of ssb activity in the 40 meter cw portion of the band, we
> can still blast thru. We would need something to all sync to for frequency
> hopping. Then we could encode so we could only hear certain cw signals on the
> same set of frequencies etc. e.g. we could have a qrp frequency hopping
> algorithm so that we could only hear those that had the qrp sequence.
> These rigs would have to be synthesized, or we could start out with a few
> standard frequencies for the early prototyping ... e.g. 7035, 7040, 7045, 7050,
> 7055 7060. Then with just a simple algorithm we could hop the frequencies
> , combine to the tune of some standard signal , and away we go.. spread
> spectrum cw. We could just use a counter to freq hop at first so it wouldn't
> be too complicated. Oh well, sorry for thinking aloud at lunch time, but
> I've always wanted to do some spread spectrum stuff, but never followed thru
> with it.
>
> 73 all Brad WB8YGG

Alas, in their infinite wisdom the FCC only allows spread
spectrum at 420MHz and up, and has imposed quite a number of obnoxious
requirements on it even there (such that hams cannot run 'surplus'
equipment legally even).

FWIW, I *am* trying to come up with a direct sequence ss
voice/data rig (can't yet come up with an elegant scheme to
synchronize the receiver to the transmitter)(yes I've read the arrl's
articles and have *#MAJOR#* objections to their synching schemes).
Will let y'all know if/when it turns into reality...

--

While (its_not_working())
 mess_with_it();

John Welch, N9JZW
jjw@seastar.org

From qrp-admin@Think.COM Fri Mar 4 10:01:29 1994
Date: Fri, 04 Mar 1994 09:00:04 -0600 (CST)
From: "JEFF M. GOLD" <JMG@tntech.edu>
Subject: QRP expedition

The Amateur Radio Club at Tennessee Technological University (TTARS) is going to be doing a QRP expedition (special events) on April 16, 17, 18.

The purpose of this expedition is to promote amateur radio, and in particular show how lower power is an effective mode of communications both for SSB and CW. I hope that this will really inspire the college students here (almost all are Technicians) to upgrade to General Class and to get them more interested in Ham radio in general.

We will be going to a state park that has some pretty good wilderness type areas with some great cliffs. If the weather permits we will be operating at some pretty spectacular locations. We plan on operating both SSB and CW with a possibility of 2 seperate stations. We will either have certificates or QSL cards with a picture of one of the locations. I hope to write the experience up for a magazine article.

I would like some input in setting up the schedule of operating bands/modes/frequencies. The only advertisement for this event will be via Internet and Packet (part of the concept). I think that we will probably operate between 15:00Z and 04:00Z daily. We will be setting up on the 15th and if things go well start operating in a test mode at that point. So what do suggest for example for CW from xx-xx on Y meters at ZZZZZ.ZZ freq-ZZZZZ.ZZ freq.

Due to the fact that most of the operators (99.9%) are not CW people (yet) much of the planned operating will be on SSB.. which I believe is good.. too many people have the concept that QRP is CW only and that turns some people off to start with..to get more people trying this... hopefully will be able to show them it works well on SSB also.

thanks

Jeff, AC4HF

From qrp-admin@Think.COM Fri Mar 4 12:55:02 1994
From: wb9omc@ecn.purdue.edu (Duane P Mantick)
Subject: Re: QRP expedition
Date: Fri, 4 Mar 1994 12:54:31 -0500 (EST)

>
> I would like some input in setting up the schedule of operating
> bands/modes/frequencies. The only advertisement for this event will be

> via Internet and Packet (part of the concept). I think that we will
> probably operate between 15:00Z and 04:00Z daily. We will be setting up
> on the 15th and if things go well start operating in a test mode at that
> point. So what do suggest for example for CW from xx-xx on Y meters at
> ZZZZZ.ZZ freq-ZZZZZ.ZZ freq.

>

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> good.. too many people have the concept that QRP is CW only and that
> turns some people off to start with..to get more people trying this...
> hopefully will be able to show them it works well on SSB also.

>

Hey, sounds neat. I don't know if I will be even able to hear
you, much less work you from Indiana - I am sort of "stuck" on 10 meters
from 28.3 to 28.5. But once you get a schedule of what you plan to do,
I wouldn't mind tuning in a bit.

More than likely your best bets on 10 meters will be around
sunrise and around sunset. If mother nature elects to cooperate, you
might get some 10meter work throughout the day but with the sunspot
cycle sucking the way it is, it will likely be iffy at best.

If you go on 10M, keep an ear out for:

28.325 The infamous Texas mush-mouth who can't complete a single sentence
without using some sort of foul language.....

(and I might add, the FCC is *on* this one, so staying AWAY and NOT
participating in the .325 flamfest would be a REAL good idea.....)

28.375 to 28.395 Lots of nets meet here.....

28.475 to 28.5 A lot of DX work seems to happen here, which
you might find interesting to see if you can pick up
any QSO's.....

Also there tend to be a lot of spanish-speaking stations cropping up
between 28.3 and 28.350. Many of these appear to be legit (more or less)
hams, but an awful lot of it sounds rather pirate-ish. Sometimes from
my Indiana QTH I can tune that who band segment (28.3 to 28.5) and
some of the spanish-speaking stations are the ONLY thing I can hear.....

My gut feeling is that the upper half of this band segment, say
from 28.4 to about 28.475 would be a real good place to work USB.

I worked from the Great Smokies in about 1989 when the cycle was
good and 10 meters was hoppin' pretty nicely - from an altitude,
low power works REAL well. I was back there again last August and

even though the cycle is fairly poor, I was still able to nail down a station in Brazil.

In fact, now that you mention it, about the only DX I hear on 10 these days seems to be from south, in the Caribbean or in central or south america. I don't know what altitude you'll be at, but you might try pointing south and see if you can work any of those folks.

Happy hunting, hope you make lots of QSO's.

QRP-73 (kind of rhymes, eh?)

Duane
WB9OMC

From qrp-admin@Think.COM Thu Feb 24 19:45:09 1994
From: jpo@acd4.acd.com (Jim Osburn)
Subject: QRP in The Park
Date: Thu, 24 Feb 94 16:18:40 EST

If it's not raining, snowing, sleeting or hailing this coming Saturday afternoon, I think I will try a little QRP in the park.
It's going to be cold so I will be operating from inside my car.
I don't know which park I will operate from, but it will be one of the local city or county parks.
I might try out the club's Field Day site.
I will probably do it from 1:00 PM until 4:00 PM EST.
My rig will be my HW-8.
I will have two antenna's, a 15 m dipole and a 20 m hamstick.
I might also improvise with some wire.
Power source will be my 5 AH Gates battery.
I won't be on any set frequency, I'll just tune around until I find someone to work. I'll tune the novice band on 15 m too.
I will listen on the 25/85 repeater in case anyone would like to join me for a little QRP in the park.
Perhaps I can start making a habit of doing this on Saturday afternoons instead of listening to the opera. Ham radio is more fun than opera.

73,

Jim, WD9EYB

From qrp-admin@Think.COM Mon Feb 28 09:43:58 1994
From: jpo@acd4.acd.com (Jim Osburn)
Subject: QRP In The Park Was Fun
Date: Mon, 28 Feb 94 8:52:27 EST

I consider my effort to operate QRP in the park Saturday afternoon to be a success. I learned a couple of things though:

Yes, it is possible to send Morse code with your gloves on.

And, the shivering doesn't mess up your sending too badly.

Actually it wasn't that bad. The temperature was in the middle to upper twenties and the sun was out. Operating from inside the car was comfortable.

I got to the park a little after 1:00 PM EST. I set up in the picnic grounds, which I had all to myself. I put my 15 m dipole up in a tree installed as a sloper sloping to the west. I was too lazy to put the other end up in a tree so I just tied it to the car. I wanted to work the west coast anyway.

I spent the next couple of hours tuning around the 15 m novice band. There seemed to be lots of good activity on 15 m so I didn't try 20 m. I had three QSO's. One of the QSO's was with Dave, AA6TE. What a good call sign. I also heard a Hawaii station that was very loud. But, he didn't hear me although I called him many times. I also answered a station in Venezuela but wasn't able to reach him.

My HW-8 did very well. My QRP Wattmeter indicated just a little less than one Watt of output.

I had a good time operating QRP in the park.
I'm going to do it again soon.

73,

Jim, WD9EYB

From qrp-admin@Think.COM Thu Mar 3 11:27:37 1994
Date: 03 Mar 94 11:24:47 EST
From: Bob Gobrick WA6ERB <70466.1405@CompuServe.COM>
Subject: QRP Timewarp

TO: >INTERNET:qrp@think.com

I feel like I'm in a QRP timewarp...Does anyone else feel this way? What's happening to our QRP hobby? Here I just finish building my neato NorCal 40 and work 4 countries in 3 days while I'm tuning it up (Columbia, France, US and Canada) and now all of a sudden I feel my new rig is obsolete when I hear the likes of Chuck with his new K5F0 Special and Doug KI6DS with Wayne's new Sierra rig. Things are happening too fast. Additionally I have back burnered a NN1G rig which I need time to build... We need a moratorium...No new QRP rigs for at least another month or so :-). If things keep up the way their going the ARCI Dayton Hospitality

Suite will have to move to Stoufers (sic) ballroom.

Well I hope everyone takes the above with a grain of QRP salt. I just wanted to thank all the folks who are contributing to the QRP rig building hobby. I think I've read more stuff on QRP rigs in the last year than the all of the last ten years of activity in the QRP Quarterly and Sprat. And there's more coming to supplement the fantastic QRPP newsletter - The K5KO newsletter, the Colorado QRP club newsletter, etc. Just great...

Now the next trick will be to come up with a reference index of all these QRP articles and reviews - something like what Dit-Dah publications does for the QST/CQ/73 articles. Maybe that's a project I can work on.... when I get time free from building my backlog of club projects.

73 Bob WA6ERB/VE2DRB
INTERNET:70466.1405@compuserve.com

From qrp-admin@Think.COM Thu Mar 3 20:38:39 1994
Date: Thu, 3 Mar 1994 12:23:00 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: QRP Timewarp

> I feel like I'm in a QRP timewarp...Does anyone else feel this way?
> What's happening to our QRP hobby? Here I just finish building my
> neato NorCal 40 and work 4 countries in 3 days while I'm tuning it up
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> I get time free from building my backlog of club projects.
>
> 73 Bob WA6ERB/VE2DRB

> INTERNET:70466.1405@compuserve.com

>

>

I whole heartedly agree! It's amazing the amount of stuff that is out there to be built that has already been designed. I would need to take a year or two off of work to try out everything that is out there. Now that all this creative energy has been established, it would be fun to harness it into a new level of communications. How about a spread spectrum cw project so that with all the influx of ssb activity in the 40 meter cw portion of the band, we can still blast thru. We would need something to all sync to for frequency hopping. Then we could encode so we could only hear certain cw signals on the same set of frequencies etc. e.g. we could have a qrp frequency hopping algorithm so that we could only hear those that had the qrp sequence. These rigs would have to be synthesized, or we could start out with a few standard frequencies for the early prototyping ... e.g. 7035, 7040, 7045, 7050, 7055 7060. Then with just a simple algorithm we could hop the frequencies, combine to the tune of some standard signal, and away we go.. spread spectrum cw. We could just use a counter to freq hop at first so it wouldn't be too complicated. Oh well, sorry for thinking aloud at lunch time, but I've always wanted to do some spread spectrum stuff, but never followed thru with it.

73 all Brad WB8YGG

From qrp-admin@Think.COM Thu Mar 3 22:41:37 1994

From: Stephen Trier <sct@po.cwru.edu>

Date: 4 Mar 1994 03:41:23 GMT

Subject: Re: QRP Timewarp

Spread-spectrum is fascinating, but unfortunately the FCC doesn't allow it below 70 cm. The ARRL's recent petition to lift many of the spread spectrum limits doesn't request SS privileges below 50 MHz. The concern is a treaty limitation forbidding use of "ciphers" on amateur HF.

However, there's no reason not to experiment with SS CW on the higher bands. Perhaps something interesting would emerge.

Stephen

--

Stephen Trier
sct@po.cwru.edu
KB8PWA

"Socrates was a famous Greek teacher who went
around giving people advice. They killed him."
- Anonymous, quoted by Richard Lederer

From qrp-admin@Think.COM Fri Mar 4 08:08:18 1994

Date: Fri, 4 Mar 1994 08:05:47 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: QRP Timewarp

>
> Spread-spectrum is fascinating, but unfortunately the FCC doesn't allow
> it below 70 cm. The ARRL's recent petition to lift many of the spread
> spectrum limits doesn't request SS privileges below 50 MHz. The concern
> is a treaty limitation forbidding use of "ciphers" on amateur HF.
>
> However, there's no reason not to experiment with SS CW on the higher
> bands. Perhaps something interesting would emerge.
>
> Stephen
>
>

I wonder if they would allow for an experimenters license on hf. I guess that fighting international cipher treaties is beyond my scope of interest.. It would be pretty neat to be able to turn on the old cw spreader, and select the QRP internet sequencing algorithm and away you go.. oh well.
Good info.. thanks.. Brad WB8YGG

> --
> Stephen Trier "Socrates was a famous Greek teacher who went
> sct@po.cwru.edu around giving people advice. They killed him."
> KB8PWA - Anonymous, quoted by Richard Lederer
>
>

From qrp-admin@Think.COM Fri Mar 4 08:45:52 1994
Date: Fri, 4 Mar 94 08:27:13 EST
From: dquagliana@attmail.att.com

Hi gang,
While flipping through the March 1994 QST, I happened across an article from MFJ on page 157 for a book entitled "Solid State QRP Projects". It is described as "52 QRP projects in 8 chapters". Does anyone already have this book. Is it a collection of "new" projects or a rehash of old project? I already have several QRP construction books, so I don't want to get it if it doesn't contain anything "new" or different.

Anyone want to comment on it?
Doug KA2UPW
dquaglia@cbnewsj.cb.att.com

From qrp-admin@Think.COM Fri Mar 4 08:56:36 1994

From: jjw@seastar.org (John Welch)
Date: Thu Mar 3 08:43:16 1994

Newsgroups: qrp
Path: jjw
From: jjw@seastar.org (John Welch)
Subject: Re: Need Murata Filters
Date: Thu, 3 Mar 1994 14:43:11 GMT
Message-ID: <CM3FK0.A8n@seastar.org>
Distribution: local
References: <9403030635.AA00569@deneb.csustan.edu>
Reply-To: jjw@seastar.org (John Welch)
Followup-To: qrp
Organization: Welch Research.
Lines: 25

As quoted from <9403030635.AA00569@deneb.csustan.edu> by nshore!
usenet.INS.CWRU.Edu!deneb.csustan.edu!dh (Doug Hendricks):

> Can someone on the net tell me a source and a price for the following
> Murata filters? If I can find a source for the filters, I will have an
> article for a SSB QRP transceiver. But, the rig requires one of these
> filters. Any help would be appreciated.
>
> 2. Murata CFM455I

Doug, I *think* the above is a close match to a Toko
HCFM2-455A (1K input imp, 1.5k output imp, 6db bw of 4kHz, small,
three pins). Digikey sells these for \$2.84 each (part #TK2330, page
153 of catalog #942).

They also sell a nice audio bandpass filter, Toko THB111A,
which is a 300Hz to 3KHz with 30db/octave slopes. Digikey part
#TK5425-ND, \$21.39 each (but drops quickly in quantity to just over
\$10 each for 100). This is single-supply part, so count the cost of
making a negative voltage against doing it all with op-amps and the
price isn't *so* bad.

--

While (its_not_working())
 mess_with_it();

John Welch, N9JZW
jjw@seastar.org

From qrp-admin@Think.COM Sat Mar 5 05:09:24 1994
Date: Sat, 05 Mar 1994 02:05:20
Subject: Re: QRP Timewarp
From: mjsilva@ted.win.net (Michael Silva)

>
>I feel like I'm in a QRP timewarp...Does anyone else feel this way?
>What's happening to our QRP hobby? Here I just finish building my
>neato NorCal 40 and work 4 countries in 3 days while I'm tuning it up
>(Columbia, France, US and Canada) and now all of a sudden I feel my new
>rig is obsolete when I hear the likes of Chuck with his new K5FO Special
>and Doug KI6DS with Wayne's new Sierra rig. Things are happening too
>fast. Additionally I have back burned a NN1G rig which I need time to
>build... We need a moratorium...No new QRP rigs for at least another month
>or so :-). If things keep up the way their going the ARCI Dayton Hospitality
>Suite will have to move to Stouffers (sic) ballroom.
>
>Well I hope everyone takes the above with a grain of QRP salt. I just wanted
>to thank all the folks who are contributing to the QRP rig building hobby.
>I think I've read more stuff on QRP rigs in the last year than the all of
>the last ten years of activity in the QRP Quarterly and Sprat. And there's
>more coming to supplement the fantastic QRPp newsletter - The K5KO newsletter,
>the Colorado QRP club newsletter, etc. Just great...
>
>

Hello, everyone,

Alright, I give up. I don't understand most of these references! I'm new here, have mercy!

Seriously, I signed up for this group because I want to get back into building after many years of screwing around with computers, and QRP seems to be where the builders live these days. I *do* crank my 100w rig down to 5w when I can, mostly because that way it doesn't set off the motion-sensing floodlights outside my window, but I am enjoying reading about all of your (plural) accomplishments. What you are all doing is the closest to what radio meant to me in my early years, when I would stand outside and imagine talking to someone on the next hill with a little radio of my own.

Anyway, where do I find out about all this hardware. Are they circuits and/or kits and/or finished rigs? What should I be subscribing to, both on Internet and in the real (US Post Office) world? What should I be reading? I've got "QRP Classics", "Solid State Design...", and the W1FB books, among others.

Finally, I'm accumulating a parts-supplier list on Microsoft Works for Windows, and using it to generate send-me-a-catalog letters and address labels. If anyone is interested, I'd be happy to share it -- just tell me how and where.

Thanks and 73,
Mike, KK6GM

From qrp-admin@Think.COM Wed Feb 23 19:15:49 1994
Date: Wed, 23 Feb 1994 18:14:37 -0600
From: aarnett@prairienet.org (Andrew Arnett)
Subject: qrp w/ not so great ant

After some time off from amateur radio, I finally got the rest of the HF equipment together that I needed. Today, before sunset, I managed to work a K0 in Missouri on 40m from Champaign, IL. I was very happy to get a 559 report since I was using a 10m piece of wire with an average elevation of about 2 or 3 feet above ground level. I have it strung across my room (in what a friend told me is called a "garden" apartment.)

Does this kind of operation (lousy antennas) give QRPers a bad name? Any comments? Although I can't get a dipole up in this location, its a good reason to get some wire outside and higher up. (That and easier QSOs.) :-)

I will mention this to friends who haven't set up stations on HF, so they'll know that it isn't TOO hard to get a station together to work short distance HF (without a lot full of 60 ft oaks.)

73 de Drew kb9fko
aarnett@prairienet.org

From qrp-admin@Think.COM Thu Feb 24 13:45:57 1994
Date: Thu, 24 Feb 1994 13:37:38 -0500 (EST)
From: "Andrew M. Cohn" <andy@clark.net>
Subject: Re: qrp w/ not so great antenna

----- Forwarded message -----
Date: Thu, 24 Feb 1994 11:54:51 -0600 (CST)
From: Andrew Arnett <aarnett@firefly.prairienet.org>
To: "Andrew M. Cohn" <andy@clark.net>
Subject: Re: qrp w/ not so great ant

On Wed, 23 Feb 1994, Andrew M. Cohn wrote:

> I found your post interesting, because a "not so great" antenna is what I
> will be using with the qrp station I hope to have soon. I'm not sure how
> many feet a 10m piece of wire is, but I'll check the conversion tables!
> I intend to operate a lot out of hotel rooms, with little more than a
> wire strung around the room.
>
> By the way, what did you use, if anything, for a ground??

Maybe we should have posted this on the list in case others are interested. I leave that up to you.

For rough conversions I usually use 1 meter = 1 yard. Better is 10 cm = 4 inches and 2.54 cm = 1 inch... Some things I start to remember after looking them up in the tables 50,000 times... :-)

10m is about 33 ft or so, or approximately 1/4 wavelength. Making it an odd multiple of 1/4 wave makes sure that it will tune easily with an antenna tuner.

I did use about 2 or 3 yards of wire connected to the case ground of the transmitter to act as a counter poise. If it was 1/4 wavelength it would be better. I know that when I touched the case ground with my hand, I did affect the tuning of the antenna. Fortunately this is QRP, because if it was QRO you can get a shock. I didn't use a separate ground wire to an earth ground because it wouldn't really gain much.

As an additional note, I was using a 12V power supply. I don't know if you're going to use AC or batteries.

I remember that some ham was mentioned on the QRP list. It might have been last year after Dayton. Apparently he does a LOT of operating from hotels. Comments were that it is amazing to watch him set up portable. He just takes out a reel of wire and casts a few yards of it out the window into a nearby tree. He uses an antenna tuner to load it up and away he goes. I don't remember what he used for a ground/counterpoise. You could check the archive or ask on the list. I've also heard that you can drop a piece of wire out of a window and let it hang (with a weight) for an antenna.

I think the only other difficult thing I've tried is using a direct conversion receiver on the 40m novice band. It might not be the easiest thing, but you can get QSOs that way.

> 72, Andy, K4ADL

Good luck! Let me know how it works out. What kind of rig are you going to use?

73 de Drew KB9FK0
aarnett@prairienet.org

From qrp-admin@Think.COM Wed Feb 23 11:19:50 1994
From: mvjf@mvubr.att.com
Date: Wed, 23 Feb 94 11:12 EST
Subject: QRP-NE

John WB7EEL

You are number NE-169.

Renewal is \$7 to Paul Kranz, W1CFI
26 Mettacomett Path
Harvard MA 01451

73/72 Jim Fitton, W1FMR QRP-NE mvjf@mvubr.att.com

From qrp-admin@Think.COM Mon Feb 28 14:18:03 1994
Date: Mon, 28 Feb 94 14:18:39 EST
From: jfw@ksr.com (John F. Woods)
Subject: QRPP back issues

I'd also like to beg someone with the prized issues #1 and #2 of QRPP for photocopies. Hmm, at Doug's recent quoted cost of \$0.67 per issue, it's almost (but not quite) cheaper to publish it on 1.4MB diskettes (of course, that's not counting duplication costs and the hassle of trying to find a least-common-denominator format so that anyone can actually view the contents...).

Thanks,
John, WB7EEL

From qrp-admin@Think.COM Fri Feb 25 13:19:09 1994
Date: Fri, 25 Feb 94 10:18:38 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QRPP Delivery Times

Gang,

i'd like to see doug announce to the group, if possible,
the shipping date of the March QRPP. then we can track
delivery times across the country. it'd be interesting
tidbit, INMHO.

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Sun Feb 27 23:06:55 1994
Date: Sun, 27 Feb 94 20:05:41 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: QRPP in the mail

QRPP is in the mail as of Monday, Feb. 28th. Please let me know when it
arrives, as I am tracking how fast the postal service is. This issue is
mailed bulk rate, as opposed to first class. The reason? Cost. The issue
is 72 pages (funny how it came out that way), and to mail it first class would
cost 98 cents. To mail it bulk rate costs 19.8 cents, a significant savings.
I figured that you would rather have more journal and get it a little slower.
I did specify that I be sent address correction information in case you have
moved. That way, the post office must attempt to deliver it, and can not just
throw it away as junk mail. This issue cost 67 cents each to print. Hope you
enjoy it.

72, Doug

From qrp-admin@Think.COM Mon Feb 28 11:31:17 1994
Date: Mon, 28 Feb 94 08:32:28 PST
From: Raymond.Anderson@EBay.Sun.COM (Ray Anderson)
Subject: QRZ ?? Am I still on list?

Havn't had any qrp list traffic in over a month. Am I still on the list,
or did it go QRT?

Ray WB6TPU
raymonda@uranium.ebay.sun.com

From qrp-admin@Think.COM Thu Mar 3 01:33:39 1994
Date: Wed, 2 Mar 94 22:32:56 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: QSO

Gang,

I had turned on the K5FO SPecial on 40 Meters, the first time since the week of February 14th just before the big BIG BBIIGG ARRL CW DX Contest. Remeber, this was the week I picked up 36 new countries with 0.95W on an 80M long wire up 10 M. I did this by catching the guys tuning antennas and rigs for the big test. Get there first and work 'em and get the heck outta the way of the rush afterwards. :-)

Anyway, tonite 40 is sounding pretty good, so at 7.041MHz I QRL the freq and give a 3x3 CQ. Boing! Hear comes VE3AR in Toronto giving me a 539 and he's 559 running 100W.

Just as I finish with him I hear a station calling me. He's 539. Get his call first time as KI6DS!!! Good ole Doug Hendricks, famous author and publisher and editor of the QRPP!!! The QSL is in the mail Doug. TU fer the QSO. It is the first K5FO Special to Sierra QSO. The Sierra, Wayne Burdick's new rig, really sounds sharp. Can't wait to get my hands on one.

The total distance, 1,359 miles / 0.95W = 1,430 miles/W. So, I made up a 1,000 mile/W certificate and will put it in the mail to him. My treat.

So after the short QSO, as QSB was setting in, I called him on the phone. He had worked a XF4, Revilla Gigedo, with the Sierra rig running 3 watts. I looked it up in my 1964 copy of Goode's World Atlas. It's due west of Manzanilla about 700 km. (about 425 miles). Long way from any land mass.

I've been to Manzanilla and a place called Las Hadas (The Angels). In fact, I sat where Bo Derick sat in filming the movie "10". Ten years later, but the same place. :-)

Anyway, another QSO held between two members of this group.

I have 129,728 cities in a data base of city, long, lat data. It takes 10+ Megbytes of disk space on my workstation at home. I use it for the KMW award (1,000 mi/W). I'm looking for another database for DX stns and cities. Any help greatly appreciated. The ARRL database for countries and center of each is not enough. New ATLAS books do not have the long-lat data anymore. Have you noticed. A rare/expensive find if you do run across one. I haven't found one that I want to spend the money on yet.

OK, back to net control.

thanks fer listening,

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Fri Feb 25 07:55:32 1994
From: mvjfm@mvubr.att.com
Date: Fri, 25 Feb 94 07:47 EST
Subject: QTH Please !

K4ADL.... Right on !

From qrp-admin@Think.COM Wed Feb 23 10:04:25 1994
Date: Wed, 23 Feb 94 09:02:22 CST
From: rand@zeta.sps.mot.com (Rand Gray)
Subject: R1 Parts List

Hi Folks,

Here is the parts list for Rick Campbell's R1 board, organized for board stuffing and also for purchasing parts.

73,

Rand W1GXN

-----CUT HERE-----CUT HERE-----

Parts List for Rick Campbell's R1 Board
Prepared by Rand Gray, W1GXN, rand@zeta.sps.mot.com
22 Feb 94, Original

Notes:

1. All aluminum electrolytic capacitors are 25 volts in the R1 parts list. In the R2, all were changed to 16 volt ratings. Clearly the 16 V ratings are okay for this application, and if you are building the R2 as well, you might wish to go for the 16 V capacitors. On the other hand, the 25 V capacitors may fit the R1 board better (unknown at this time).
2. The 500 ohm audio taper potentiometer is not shown in either the Mouser or the Digi-Key catalogs. I located one in the Newark catalog; however, for convenience it may be just as easy to use a fixed 470 or 510 ohm 5% 1/4

watt carbon film resistor in parallel with a 5k or 10k audio taper pot. Also, some folks go the route of linear taper, and it really works okay, it's just that the response of your ear is logarithmic, not linear. An audio taper makes the control SEEM linear to the operator, whereas the linear control appears to behave non-linearly.

By Reference Designator (for board stuffing)

----- RefDes Description

C1	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF
C2	Capacitor, 0.001 uf chip capacitor (optional for HF use)
C3	Capacitor, 1.5 uf, 10%, 100 V, Panasonic ECQ-EF
C4	Capacitor, 1.8 uf, 10%, Panasonic ECQ-EF
C5	Capacitor, 5.6 uf, 10%, Panasonic ECQ-EF
C6	Capacitor, 6.8 uf, 25 V, aluminum electrolytic
C7	Capacitor, 10 uf, 25 V, aluminum electrolytic
C8	Capacitor, 10 uf, 25 V, aluminum electrolytic
C9	Capacitor, 10 uf, 25 V, aluminum electrolytic
C10	Capacitor, 33 uf, 25 V, aluminum electrolytic
C11	Capacitor, 0.15 uf, 5%, 50 V, metalized polyester film
C12	Capacitor, 0.0068 uf, 5%, 50 V, polypropylene
C13	Capacitor, 0.22 uf, 5%, 50 V, metalized polyester film
C14	Capacitor, 0.033 uf, 5%, 50 V, metalized polyester film
C15	Capacitor, 0.18 uf, 5%, 50 V, metalized polyester film
C16	Capacitor, 0.022 uf, 5%, 50 V, metalized polyester film
C17	Capacitor, 0.12 uf, 5%, 50 V, metalized polyester film
C18	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C19	Capacitor, 220 pf, 10%, 50 V, ceramic
C20	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C21	Capacitor, 220 pf, 10%, 50 V, ceramic
C22	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C23	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF
C24	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF
C25	Capacitor, 0.002 uf, 10%, 50 V, ceramic
C26	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C27	Capacitor, 10 uf, 25 V, aluminum electrolytic
C28	Capacitor, 220 pf, 10%, 50 V, ceramic
C29	Capacitor, 220 pf, 10%, 50 V, ceramic
C30	Capacitor, 100 uf, 25 V, aluminum electrolytic
C31	Capacitor, 100 uf, 25 V, aluminum electrolytic*
C32	Capacitor, 0.047 uf, 10%, 50 V, ceramic

D1 Diode, silicon, 1N4148

L1 Inductor, 3.9 mh, Toko 10RB

L2 Inductor, 27 mh, Toko 10RB
L3 Inductor, 18 mh, Toko 10RB
L4 Inductor, 33 mh, Toko 10RB
L5 Inductor, 33 mh, Toko 10RB
L6 Inductor, 33 mh, Toko 10RB
L7 Inductor, 120 mh, Toko 10RB

R1 Resistor, 51 ohms, 5%, 1/4 W, carbon film
R2 Resistor, 22 ohms, 5%, 1/4 W, carbon film
R3 Resistor, 2.7k ohms, 5%, 1/4 W, carbon film
R4 Resistor, 3.3k ohms, 5%, 1/4 W, carbon film
R5 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R6 Resistor, 5.6k ohms, 5%, 1/4 W, carbon film
R7 Resistor, 100k ohms, 5%, 1/4 W, carbon film
R8 Resistor, 1k ohms, 5%, 1/4 W, carbon film
R9 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R10 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R11 Resistor, 500 ohms, potentiometer, audio taper, panel mount
R12 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R13 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R14 Resistor, 27k ohms, 5%, 1/4 W, carbon film
R15 Resistor, 47k ohms, 5%, 1/4 W, carbon film
R16 Resistor, 100k ohms, 5%, 1/4 W, carbon film
R17 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R18 Resistor, 1M ohms, 5%, 1/4 W, carbon film
R19 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R20 Resistor, 5.6k ohms, 5%, 1/4 W, carbon film
R21 Resistor, 27k ohms, 5%, 1/4 W, carbon film
R22 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R23 Resistor, 33k ohms, 5%, 1/4 W, carbon film
R24 Resistor, 10k ohms, potentiometer, PC mount, Panasonic MAG14
R25 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R26 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R27 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R28 Resistor, 4.7 ohms, 5%, 1/4 W, carbon film
R29 Resistor, 4.7 ohms, 5%, 1/4 W, carbon film
R30 Resistor, 150 ohms, 5%, 1/4 W, carbon film
R31 Resistor, 150 ohms, 5%, 1/4 W, carbon film
R32 Resistor, 1 ohms, 5%, 1/4 W, carbon film
R33 Resistor, 1 ohms, 5%, 1/4 W, carbon film
R34 Resistor, 10 ohms, 5%, 1/4 W, carbon film

Q1 Transistor, silicon NPN, 2N3904
Q2 Transistor, silicon NPN, 2N3904
Q3 Transistor, silicon NPN, 2N3904
Q4 Transistor, silicon NPN, 2N3904
Q5 Transistor, silicon NPN, 2N3904
Q6 Transistor, silicon NPN, 2N3904

Q7	Transistor, silicon FET, 2N5457
Q8	Transistor, silicon NPN, 2N3904
Q9	Transistor, silicon NPN, 2N3904
Q10	Transistor, silicon PNP, 2N3906
Q11	Transistor, silicon NPN, TIP29C
Q12	Transistor, silicon PNP, TIP30C

U1	Module, power splitter, Toko TK2518
U2	Module, mixer, Mini-Circuits SBL-1
U3	Module, mixer, Mini-Circuits SBL-1
U4	IC, linear, Philips NE5514
U5	IC, linear, Philips NE5514
U6	IC, linear, National LM387

By Vendor or Distributor Part Number (for purchasing)

Vendor	Part Number	Distributor	Dist PN	Qty	Reference Designators
Panasonic	ECQ-E1105KF	Digi-Key	EF1105	3	C1,23,24
Panasonic	ECU-V1H102KBN	Digi-Key	PCC102BN	100	C2 (min order 100)
Panasonic	ECQ-E1155KF	Digi-Key	EF1155	1	C3
Panasonic	ECQ-E1185KF	Digi-Key	EF1185	1	C4
Panasonic	ECQ-E1565KF	Digi-Key	EF1565	1	C5
Panasonic	ECE-A25Z6R8	Digi-Key	P6628	1	C6
Panasonic	ECE-A25Z10	Digi-Key	P6616	4	C7,8,9,27
Panasonic	ECE-A25Z33	Digi-Key	P6618	1	C10
Panasonic	ECQ-V1H154JL	Digi-Key	P4527	1	C11
Panasonic	ECQ-P1H682GZ	Digi-Key	P3682	1	C12
Panasonic	ECQ-V1H224JL	Digi-Key	P4529	1	C13
Panasonic	ECQ-V1H333JL	Digi-Key	P4519	1	C14
Panasonic	ECQ-V1H184JL	Digi-Key	P4528	1	C15
Panasonic	ECQ-V1H223JL	Digi-Key	P4517	1	C16
Panasonic	ECQ-V1H124JL	Digi-Key	P4526	1	C17
Panasonic	ECU-S1J104ZUA	Digi-Key	P4917	4	C18,20,22,26
Panasonic	ECU-S1J221JCA	Digi-Key	P4804	4	C19,21,28,29
Panasonic	ECU-S1J222JCB	Digi-Key	P4804	1	C25
Panasonic	ECE-A25Z100	Digi-Key	P6620	2	C30,31
Rohm	1N4148	Mouser	592-1N4148	1	D1
Toko	181LY-392J	Digi-Key	TK4407	10	L1,4 (match to 1%)
Toko	181LY-273J	Digi-Key	TK4417	10	L2,5 (match to 1%)
Toko	181LY-183J	Digi-Key	TK4415	10	L3,6 (match to 1%)
Toko	181LY-392J	Digi-Key	TK4407	3	L7-9
Toko	181LY-124J	Digi-Key	TK4426	1	L10

Rohm	2N3904	Mouser	592-2N3904	6 Q1-Q6,8,9
National	2N5457	Digi-Key	2N5457-ND	1 Q7
Rohm	2N3906	Mouser	592-2N3906	6 Q10
Harris	TIP29C	Mouser	570-TIP29C	1 Q11
Harris	TIP30C	Mouser	570-TIP30C	1 Q12

TransOhm	29SJ250	Mouser	29SJ250-100	1 R1
TransOhm	29SJ250	Mouser	29SJ250-51	2 R2,11
TransOhm	29SJ250	Mouser	29SJ250-22	2 R3,12
TransOhm	29SJ250	Mouser	29SJ250-2.7K	2 R4,13
TransOhm	29SJ250	Mouser	29SJ250-3.3K	2 R5,14
TransOhm	29SJ250	Mouser	29SJ250-10K	9 R6,15,32,44,45, R47,58,59,60
TransOhm	29SJ250	Mouser	29SJ250-5.6K	3 R7,16,55
TransOhm	29SJ250	Mouser	29SJ250-100K	3 R8,17,50
TransOhm	29SJ250	Mouser	29SJ250-4.7K	6 R9,18,29,31,33,49
TransOhm	29SJ250	Mouser	29SJ250-1K	2 R10,19
TransOhm	29SJ250	Mouser	29SJ250-470	3 R34,51,53
TransOhm	29SJ250	Mouser	29SJ250-27K	2 R48,54
TransOhm	29SJ250	Mouser	29SJ250-1M	1 R52
TransOhm	29SJ250	Mouser	29SJ250-33K	1 R56
TransOhm	29SJ250	Mouser	29SJ250-4.7	2 R61,62
TransOhm	29SJ250	Mouser	29SJ250-150	2 R63,64
TransOhm	29SJ250	Mouser	29SJ250-1	2 R65,66
TransOhm	29SJ250	Mouser	29SJ250-10	1 R67
TransOhm	29MF250	Mouser	29MF250-10K	12 R20,21,23,24,26,27, R35,36,38,39,41,42
TransOhm	29MF250	Mouser	29MF250-15K	1 R22
TransOhm	29MF250	Mouser	29MF250-113K	1 R25
TransOhm	29MF250	Mouser	29MF250-511K	1 R28
TransOhm	29MF250	Mouser	29MF250-52.3K	1 R37
TransOhm	29MF250	Mouser	29MF250-232K	1 R40
TransOhm	29MF250	Mouser	29MF250-649K	1 R43
Bourns	96A1A-B24-D	Newark	87F2098-08	1 R46**
Panasonic	EVM-MAG01B14	Digi-Key	MAG14	2 R30,57

Toko	456DS-1012	Digi-Key	TK2518	1 U1
Mini-Circ	SBL-1	Dan's	SBL-1	2 U2,3
Philips	NE5514	Digi-Key	NE5514-ND	2 U4,5
National	LM387	Digi-Key	LM387N-ND	1 U6

* C31 was 68 uf, 25V aluminum electrolytic; substitute 100 uf instead for convenience (it changes to 100 uf on the R2)

** Substitute a 510 ohm 5% 1/4 watt fixed resistor paralleled with a 5K audio taper pot, Mouser 31VJ305 if desired.

From qrp-admin@Think.COM Mon Feb 21 07:10:59 1994
Date: Sat, 19 Feb 94 10:21:03 EST

From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: R1,R2,T2 artwork

>
>I've built the R2. Used it as a simple direct-conv. receiver at first,
>and was surprisingly satisfied, so took me a while to build my first
>phasing network. Well, I did last night for 40 meters, and boy, was I
>pleased. You really have to listen hard to hear the "other side" on all
>but those strong broadcast carriers.

I have built several R1 and R2 receivers, and your correct, their impressive.

>I built it without the elaborate diplexer networks at the inputs -- I
>balked a bit at the need to match those expensive inductors and
>capacitors. I used the simple diplexer from the Lewallen Optimized QRP
>Transceiver -- the one he faults for not terminating the lowest
>frequencies correctly. He's probably right, but it still performs very
>well with the less-elaborate circuit -- no audible overload problems to my
>ear. So save a few bucks. (How many people can accurately measure 3.9 to
>27 MILLIhenry inductors, anyway?)

It is VERY important to terminate a mixer properly. The differences in IMD, intercept etc. will be apparent in A vs B tests. Even the human ear can evaluate this. One example would be in being able to copy a weak station in the presence of strong signals (e.g. pileups, contestings etc.). The 50 ohm resistor and .1uF capacitor is not a diplexer (its a simple wide band termination). An acceptable compromise would be to add at least the LP and HP portion of the diplexer. In the R1, the purchase the 3.9 and 18 mH inductors. In the R2, purchase 3 of each, build a simple LC oscillator (for audio frequencies) and by substitution use the 2 that produce nearly the same frequency.

I do make several modifications to improve on the published design. They are:

1. Making sure the AF preamp (Q1) has a 50 ohm input termination. It will as published only with a 12V power source. I usually use 13.8V supplies (which is also the typical output of what we all call 12V supplies). This can be done by changeing a single resitor value.
2. As published, the low noise dual preamps are not biased correctly (at least not as described in the manufacteurs specification/application).
3. The author simply scaled the values in the 7th order eliptical filter. A big improvemnet in this filter (specially for CW) can be gained while using standard part values.
4. There is no need to run the quiescent current of the AF power amp at 100mA, unless you want high power hi-fi. You waste power and generate unnecessary heat. I have found that 10 to 20mA of quiescent current is all that is

necessary. As published, the adjustment won't get down this low, so you need to change 1 resistor.

>I put the amplitude balance control on the front panel so I can change it
>easily when I change bands. Band changing will be a matter of neat little
>circuit-board boxes with phasing networks and input lowpass filters -- all
>with three carefully-spaced BNC connectors! (I may make them 2 or 3 bands
>per box -- found some neat 4PDT slide switches at our last hamfest!)

Hint: A better approach to cover multiple bands would be to use a pre-mixed
VFO design and you won't need to make all band to band adjustments.

>Try it. An unusual, very clean-performing and excellent-sounding design!
>Just for fun, I can switch out ALL the audio filters, and hear from about
>100 Hz to 15 kHz -- true hi-fi!

True, but all that fidelity is just QRM (just noise with no intelligence).

73

Ed W1AAZ

>John K0JD
>
>
>---
> * Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly
>

From qrp-admin@Think.COM Mon Feb 21 10:39:46 1994
Date: Mon, 21 Feb 94 09:22:42 EST
From: epacyna@auratek.com (Edward Pacyna)
Subject: Re: R1,R2,T2 artwork

>
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>100 Hz to 15 kHz -- true hi-fi!

True, but all that fidelity is just QRM (just noise with no intelligence).

73

Ed W1AAZ

From qrp-admin@Think.COM Mon Feb 21 10:51:14 1994
Date: Mon, 21 Feb 94 09:49:40 CST
From: rand@zeta.sps.mot.com (Rand Gray)
Subject: R2 Parts List

Hi Gang,

Since Brad Mitchell is in the process of scanning the R1, R2, and T2 artworks to make available on think.com, I thought it might be useful to some of you to have a parts list for the same.

I have so far only compiled one for the R2, but a T2 will follow shortly, and then the R1.

It's organized two ways, one for stuffing, one for purchasing. I provided Digi-Key and Mouser part numbers for everything I could find in those two catalogs. Some parts are not yet sourced, so anyone who has input on those feel free to speak up!

Also, note that in the R2, there are a number of components which need to be matched to within 1% of each other. There are some capacitors and inductors in this category. Rick Campbell suggests purchasing 10 of each required value and matching them with an RLC bridge. Unfortunately, this makes for a very expensive R2, as in small quantities the inductors are about \$3.40 or so in the Digi-Key catalog. There are 3 values to buy and match, so you are looking at around \$100 to invest in 30 inductors, of which you need 6. The capacitors are much cheaper, so there is not such a problem there.

The inductor prices drop to less than a dollar in larger volumes; do we have enough constructors interested in a group purchase? Also is there a volunteer with an RLC bridge?

On the other hand, maybe we can find a more reasonable price elsewhere?

Anyway, here's the R2 Parts List. Any corrections or improvements welcomed!

This list was compiled from the QST schematic, caption notes, and article text. There are a few errors on the schematic, which I have corrected (for example, Q10 is shown as a 2N3904 in the schematic, whereas it clearly should be marked 2N3906 as it is a PNP).

73,

Rand

-----CUT HERE-----CUT HERE-----

Parts List for Rick Campbell's R2 Board

Prepared by Rand Gray, W1GXXN, rand@zeta.sps.mot.com

21 Feb 94

By Reference Designator (for board stuffing)

RefDes Description

C1	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF, match to C11
C2	Capacitor, 0.001 uf chip capacitor (optional for HF use)
C3	Capacitor, 1.5 uf, 10%, 100 V, Panasonic ECQ-EF, match to C13
C4	Capacitor, 1.8 uf, 10%, Panasonic ECQ-EF, match to C14
C5	Capacitor, 5.6 uf, 10%, Panasonic ECQ-EF, match to C15
C6	Capacitor, 33 uf, 16 V, aluminum electrolytic
C7	Capacitor, 10 uf, 16 V, aluminum electrolytic
C8	Capacitor, 10 uf, 16 V, aluminum electrolytic
C9	Capacitor, 33 uf, 16 V, aluminum electrolytic
C10	Capacitor, 10 uf, 16 V, aluminum electrolytic
C11	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF, match to C1
C12	Capacitor, 0.001 uf chip capacitor (optional for HF use)
C13	Capacitor, 1.5 uf, 10%, 100 V, Panasonic ECQ-EF, match to C3
C14	Capacitor, 1.8 uf, 10%, 100 V, Panasonic ECQ-EF, match to C4
C15	Capacitor, 5.6 uf, 10%, 100 V, Panasonic ECQ-EF, match to C5
C16	Capacitor, 33 uf, 16 V, aluminum electrolytic
C17	Capacitor, 10 uf, 16 V, aluminum electrolytic
C18	Capacitor, 10 uf, 16 V, aluminum electrolytic
C19	Capacitor, 33 uf, 16 V, aluminum electrolytic
C20	Capacitor, 10 uf, 16 V, aluminum electrolytic
C21	Capacitor, 0.001 uf, 1%, XICON polyester film
C22	Capacitor, 0.001 uf, 1%, XICON polyester film
C23	Capacitor, 0.001 uf, 1%, XICON polyester film
C24	Capacitor, 10 uf, 16 V, aluminum electrolytic
C25	Capacitor, 10 uf, 16 V, aluminum electrolytic
C26	Capacitor, 0.001, uf, 1% XICON polyester film
C27	Capacitor, 0.001, uf, 1% XICON polyester film
C28	Capacitor, 0.001, uf, 1% XICON polyester film
C29	Capacitor, 10 uf, 16 V, aluminum electrolytic

C30 Capacitor, 10 uf, 16 V, aluminum electrolytic
C31 Capacitor, 0.0068 uf, 5%, 50 V, polypropylene, Panasonic P series
C32 Capacitor, 0.033 uf, 5%, 50 V, metalized polyester film, Panasonic P
C33 Capacitor, 0.022 uf, 5%, 50 V, metalized polyester film, Panasonic P
C34 Capacitor, 0.15 uf, 5%, 50 V, metalized polyester film, Panasonic P
C35 Capacitor, 0.22 uf, 5%, 50 V, metalized polyester film, Panasonic P
C36 Capacitor, 0.18 uf, 5%, 50 V, metalized polyester film, Panasonic P
C37 Capacitor, 0.12 uf, 5%, 50 V, metalized polyester film, Panasonic P
C38 Capacitor, 220 pf, 10%, 50 V, ceramic
C39 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C40 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C41 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C42 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C43 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C44 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C45 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C46 Capacitor, 220 pf, 10%, 50 V, ceramic
C47 Capacitor, 10 uf, 16 V, aluminum electrolytic
C48 Capacitor, 220 pf, 10%, 50 V, ceramic
C49 Capacitor, 220 pf, 10%, 50 V, ceramic
C50 Capacitor, 0.047 uf, 10%, 50 V, ceramic
C51 Capacitor, 100 uf, 16 V, aluminum electrolytic

D1 Diode, silicon, 1N4148

L1 Inductor, 3.9 mh, Toko 10RB, matched to L4
L2 Inductor, 27 mh, Toko 10RB, matched to L5
L3 Inductor, 18 mh, Toko 10RB, matched to L6
L4 Inductor, 3.9 mh, Toko 10RB, matched to L1
L5 Inductor, 27 mh, Toko 10RB, matched to L2
L6 Inductor, 18 mh, Toko 10RB, matched to L3
L7 Inductor, 33 mh, Toko 10RB
L8 Inductor, 33 mh, Toko 10RB
L9 Inductor, 33 mh, Toko 10RB
L10 Inductor, 120 mh, Toko 10RB

R1 Resistor, 100 ohms, 5%, 1/8 W, carbon film
R2 Resistor, 51 ohms, 5%, 1/8 W, carbon film
R3 Resistor, 22 ohms, 5%, 1/8 W, carbon film
R4 Resistor, 2.7k ohms, 5%, 1/8 W, carbon film
R5 Resistor, 3.3k ohms, 5%, 1/8 W, carbon film
R6 Resistor, 10k ohms, 5%, 1/8 W, carbon film
R7 Resistor, 5.6k ohms, 5%, 1/8 W, carbon film
R8 Resistor, 100k ohms, 5%, 1/8 W, carbon film
R9 Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R10 Resistor, 1k ohms, 5%, 1/8 W, carbon film
R11 Resistor, 51 ohms, 5%, 1/8 W, carbon film
R12 Resistor, 22 ohms, 5%, 1/8 W, carbon film

R13	Resistor, 2.7k ohms, 5%, 1/8 W, carbon film
R14	Resistor, 3.3k ohms, 5%, 1/8 W, carbon film
R15	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R16	Resistor, 5.6k ohms, 5%, 1/8 W, carbon film
R17	Resistor, 100k ohms, 5%, 1/8 W, carbon film
R18	Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R19	Resistor, 1k ohms, 5%, 1/8 W, carbon film
R20	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R21	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R22	Resistor, 15k ohms, 1%, 1/8 W, carbon film
R23	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R24	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R25	Resistor, 113k ohms, 1%, 1/8 W, carbon film
R26	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R27	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R28	Resistor, 511k ohms, 1%, 1/8 W, carbon film
R29	Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R30	Resistor, 10k, potentiometer, PC mount, Panasonic MAG14
R31	Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R32	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R33	Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R34	Resistor, 470 ohms, 5%, 1/8 W, carbon film
R35	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R36	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R37	Resistor, 52.3k ohms, 1%, 1/8 W, carbon film
R38	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R39	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R40	Resistor, 232k ohms, 1%, 1/8 W, carbon film
R41	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R42	Resistor, 10k ohms, 1%, 1/8 W, carbon film
R43	Resistor, 649k ohms, 1%, 1/8 W, carbon film
R44	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R45	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R46	Resistor, 500 ohms, potentiometer, audio taper, panel mount
R47	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R48	Resistor, 27k ohms, 5%, 1/8 W, carbon film
R49	Resistor, 4.7k ohms, 5%, 1/8 W, carbon film
R50	Resistor, 100k ohms, 5%, 1/8 W, carbon film
R51	Resistor, 470 ohms, 5%, 1/8 W, carbon film
R52	Resistor, 1M ohms, 5%, 1/8 W, carbon film
R53	Resistor, 470 ohms, 5%, 1/8 W, carbon film
R54	Resistor, 27k ohms, 5%, 1/8 W, carbon film
R55	Resistor, 5.6k ohms, 5%, 1/8 W, carbon film
R56	Resistor, 33k ohms, 5%, 1/8 W, carbon film
R57	Resistor, 10k ohms, potentiometer, PC mount, Panasonic MAG14
R58	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R59	Resistor, 10k ohms, 5%, 1/8 W, carbon film
R60	Resistor, 10k ohms, 5%, 1/8 W, carbon film

R61 Resistor, 4.7 ohms, 5%, 1/8 W, carbon film
R62 Resistor, 4.7 ohms, 5%, 1/8 W, carbon film
R63 Resistor, 150 ohms, 5%, 1/8 W, carbon film
R64 Resistor, 150 ohms, 5%, 1/8 W, carbon film
R65 Resistor, 1 ohms, 5%, 1/8 W, carbon film
R66 Resistor, 1 ohms, 5%, 1/8 W, carbon film
R67 Resistor, 10 ohms, 5%, 1/8 W, carbon film

Q1 Transistor, silicon NPN, 2N3904
Q2 Transistor, silicon NPN, 2N3904
Q3 Transistor, silicon NPN, 2N3904
Q4 Transistor, silicon NPN, 2N3904
Q5 Transistor, silicon NPN, 2N3904
Q6 Transistor, silicon NPN, 2N3904
Q7 Transistor, silicon FET, 2N5457
Q8 Transistor, silicon NPN, 2N3904
Q9 Transistor, silicon NPN, 2N3904
Q10 Transistor, silicon PNP, 2N3906
Q11 Transistor, silicon NPN, TIP29C
Q12 Transistor, silicon PNP, TIP30C

U1 Module, power splitter, Toko TK2518
U2 Module, mixer, Mini-Circuits SBL-1
U3 Module, mixer, Mini-Circuits SBL-1
U4 IC, linear, Signetics NE5514
U5 IC, linear, Signetics NE5514
U6 IC, linear, National LM387

By Vendor or Distributor Part Number (for purchasing)

Vendor	Part Number	Distributor	Dist PN	Qty	Reference Designators
Panasonic	ECQ-E1105KF	Digi-Key	EF1105	10	C1,11,43,44 (match C1 & C11 to 1%)
Panasonic	ECU-V1H102KBN	Digi-Key	PCC102BN	100	C2,12 (min order 100)
Panasonic	ECQ-E1155KF	Digi-Key	EF1155	10	C3,13 (match to 1%)
Panasonic	ECQ-E1185KF	Digi-Key	EF1185	10	C4,14 (match to 1%)
Panasonic	ECQ-E1565KF	Digi-Key	EF1565	10	C5,15 (match to 1%)
Panasonic	ECE-A16Z33	Digi-Key	P6618	4	C6,9,16,19
Panasonic	ECE-A16Z10	Digi-Key	P6616	11	C7,8,10,17,18,20,24,25, C29,30,47
Xicon		Mouser	140-PF2A102F	6	C21-23,26-28
Panasonic	ECQ-P1H682GZ	Digi-Key	P3682	1	C31
Panasonic	ECQ-V1H333JL	Digi-Key	P4519	1	C32
Panasonic	ECQ-V1H223JL	Digi-Key	P4517	1	C33
Panasonic	ECQ-V1H154JL	Digi-Key	P4527	1	C34

Panasonic	ECQ-V1H224JL	Digi-Key	P4529	1 C35
Panasonic	ECQ-V1H184JL	Digi-Key	P4528	1 C36
Panasonic	ECQ-V1H124JL	Digi-Key	P4526	1 C37
Panasonic	ECC-F2A221JE	Digi-Key	P4028	4 C38,46,48,49
Panasonic	ECU-S1J104ZU	Digi-Key	P4917	5 C39-42,45
Panasonic	ECU-S1J473ZU	Digi-Key	P4916	5 C50
Panasonic	ECE-A16Z100	Digi-Key	P6620	4 C51

Rohm	1N4148	Mouser	592-1N4148	1 D1

Toko	181LY-392J	Digi-Key	TK4407	10 L1,4 (match to 1%)
Toko	181LY-273J	Digi-Key	TK4417	10 L2,5 (match to 1%)
Toko	181LY-183J	Digi-Key	TK4415	10 L3,6 (match to 1%)
Toko	181LY-392J	Digi-Key	TK4407	3 L7-9
Toko	181LY-124J	Digi-Key	TK4426	1 L10

Rohm	2N3904	Mouser	592-2N3904	6 Q1-Q6,8,9
	2N5457			
Rohm	2N3906	Mouser	592-2N3906	6 Q10
Harris	TIP29C	Mouser	570-TIP29C	1 Q11
Harris	TIP30C	Mouser	570-TIP30C	1 Q12

TransOhm	29SJ250	Mouser	29SJ250-100	1 R1
TransOhm	29SJ250	Mouser	29SJ250-51	2 R2,11
TransOhm	29SJ250	Mouser	29SJ250-22	2 R3,12
TransOhm	29SJ250	Mouser	29SJ250-2.7K	2 R4,13
TransOhm	29SJ250	Mouser	29SJ250-3.3K	2 R5,14
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TransOhm	29SJ250	Mouser	29SJ250-1K	2 R10,19
TransOhm	29SJ250	Mouser	29SJ250-470	3 R34,51,53
TransOhm	29SJ250	Mouser	29SJ250-27K	2 R48,54
TransOhm	29SJ250	Mouser	29SJ250-1M	1 R52
TransOhm	29SJ250	Mouser	29SJ250-33K	1 R56
TransOhm	29SJ250	Mouser	29SJ250-4.7	2 R61,62
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TransOhm	29SJ250	Mouser	29SJ250-10	1 R67
TransOhm	29MF250	Mouser	29MF250-10K	12 R20,21,23,24,26,27, R35,36,38,39,41,42
TransOhm	29MF250	Mouser	29MF250-15K	1 R22
TransOhm	29MF250	Mouser	29MF250-113K	1 R25
TransOhm	29MF250	Mouser	29MF250-511K	1 R28
TransOhm	29MF250	Mouser	29MF250-52.3K	1 R37
TransOhm	29MF250	Mouser	29MF250-232K	1 R40

TransOhm 29MF250	Mouser	29MF250-649K	1 R43
(Audio taper 500 ohm panel mount potentiometer)			1 R46
Panasonic EVM-MAG01B14	Digi-Key	MAG14	2 R30,57

Toko 456DS-1012	Digi-Key	TK2518	1 U1
Mini-Circ SBL-1	Dan's	SBL-1	2 U2,3
Signetics NE5514			2 U4,5
National LM387	Digi-Key	LM387N-ND	1 U6

From qrp-admin@Think.COM Mon Feb 21 23:00:41 1994
Date: Mon, 21 Feb 1994 19:58:31 -0800
From: ROHRWERK@holonet.net
Subject: R2 Parts List

Thanks for this service. I've already built it, but fun to have!

Interesting that neither of those big two have an *audio-taper* pot at 500 ohms. I just got a linear, and find it satisfactory.

The NE5514? It wasn't in the catalogs, but when I ordered from Digi-key it suddenly dawned on me to ask them if they had them, and THEY DID! Remember, the catalogs are helpful but they DON'T REPRESENT ABSOLUTELY EVERYTHING THE VENDOR HAS IN STOCK. Ask -- you may be surprised!

John KOJD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Mon Feb 21 23:06:06 1994
Date: Mon, 21 Feb 1994 19:58:36 -0800
From: ROHRWERK@holonet.net
Subject: R2 Parts List

On 02-21-94, www@wa8tzg.mi.org wrote to qrp@Think.COM:

>-----

>From: mcnnnet!zeta.sps.mot.com!rand (Rand Gray)

>

>The inductor prices drop to less than a dollar in larger volumes; do we
>have enough constructors interested in a group purchase?

I'd be VERY interested in buying a pre-matched set of inductors & capacitors for an R2!

--

Bill Meahan WA8TZG

>-----

Likewise me. I've built the thing, but have used only the simple network used by Lewallen in the Optimized QRP Transceiver. That is the only real big pitfall for many constructors in building up this slick little receiver!

While I'm at it, somebody wrote me wondering who would supply kits? Rick himself promised R1 kits, and said in the R2 article "send SASE for current kit information." Well, he has about 3 of my SASE's he hasn't returned in 10 months! And folks say he takes about 3 months or more to even get boards out to you!

I imagine that the author of a circuit, and a kit supplier (like A and A, S and S, or whoever) have to get together, and assess the market, and then decide to put out the kit. Anybody got the contacts to play matchmaker here?

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Mon Feb 21 19:08:40 1994

Date: Mon, 21 Feb 1994 18:42:49 EST

From: wwm@wa8tzg.mi.org (Bill Meahan)

Subject: Re: R2 Parts List

>From: mcnnnet!zeta.sps.mot.com!rand (Rand Gray)

>

>The inductor prices drop to less than a dollar in larger volumes; do we have
>enough constructors interested in a group purchase?

I'd be VERY interested in buying a pre-matched set of inductors & capacitors for an R2!

--

Bill Meahan WA8TZG

wwmeahan@wa8tzg.mi.org

Hey, this is my OWN computer! I can say what I want!
cat: a purr bearing mammal

From qrp-admin@Think.COM Wed Feb 23 09:59:14 1994
Date: Wed, 23 Feb 94 08:57:33 CST
From: rand@zeta.sps.mot.com (Rand Gray)
Subject: R2 Parts List, Revision A

Hi Gang,

I found all of the parts missing from the original R2 parts list, along with a few discrepancies.

Here's Revision A of Rick Campbell's R2 receiver parts list.

73,

Rand W1GXX

-----CUT HERE-----CUT HERE-----
Parts List for Rick Campbell's R2 Board
Prepared by Rand Gray, W1GXX, rand@zeta.sps.mot.com
22 Feb 94, Revision A

Notes:

1. The missing NE5514 ICs have appeared in Digi-Key Catalog 942, for March and April, 1994. Also, the missing 2N5457 appears in the same catalog.
2. The 220 pf ceramic capacitors have been changed from ceramic disk capacitors to NPO monolithic ceramic capacitors (it's a better capacitor, but also it is more consistent with the other chosen parts).
3. The 500 ohm audio taper potentiometer is not shown in either the Mouser or the Digi-Key catalogs. I located one in the Newark catalog; however, for convenience it may be just as easy to use a fixed 470 or 510 ohm 5% 1/4 watt carbon film resistor in parallel with a 5k or 10k audio taper pot. Also, some folks go the route of linear taper, and it really works okay, it's just that the response of your ear is logarithmic, not linear. An audio taper makes the control SEEM linear to the operator, whereas the linear control appears to behave non-linearly.
4. Some of the Panasonic capacitor part numbers changed slightly in the new Digi-Key catalog, and this has been fixed up.
5. Several of the capacitors were shown as Panasonic P series in the stuffing list, but they are really V series in the order list. The

inconsistency has been corrected.

6. The resistors were all shown to be 1/8 watt units in the original stuffing list, whereas I changed to 1/4 watt units in the order list do to the lower cost of the 1/4 watt devices. Now they are shown as 1/4 watt devices in the stuffing list. I don't think it will matter, as the resistors are installed 'on end'.

By Reference Designator (for board stuffing)

RefDes	Description
C1	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF, match to C11
C2	Capacitor, 0.001 uf chip capacitor (optional for HF use)
C3	Capacitor, 1.5 uf, 10%, 100 V, Panasonic ECQ-EF, match to C13
C4	Capacitor, 1.8 uf, 10%, Panasonic ECQ-EF, match to C14
C5	Capacitor, 5.6 uf, 10%, Panasonic ECQ-EF, match to C15
C6	Capacitor, 33 uf, 16 V, aluminum electrolytic
C7	Capacitor, 10 uf, 16 V, aluminum electrolytic
C8	Capacitor, 10 uf, 16 V, aluminum electrolytic
C9	Capacitor, 33 uf, 16 V, aluminum electrolytic
C10	Capacitor, 10 uf, 16 V, aluminum electrolytic
C11	Capacitor, 1 uf, 10%, 100 V, Panasonic ECQ-EF, match to C1
C12	Capacitor, 0.001 uf chip capacitor (optional for HF use)
C13	Capacitor, 1.5 uf, 10%, 100 V, Panasonic ECQ-EF, match to C3
C14	Capacitor, 1.8 uf, 10%, 100 V, Panasonic ECQ-EF, match to C4
C15	Capacitor, 5.6 uf, 10%, 100 V, Panasonic ECQ-EF, match to C5
C16	Capacitor, 33 uf, 16 V, aluminum electrolytic
C17	Capacitor, 10 uf, 16 V, aluminum electrolytic
C18	Capacitor, 10 uf, 16 V, aluminum electrolytic
C19	Capacitor, 33 uf, 16 V, aluminum electrolytic
C20	Capacitor, 10 uf, 16 V, aluminum electrolytic
C21	Capacitor, 0.001 uf, 1%, XICON polyester film
C22	Capacitor, 0.001 uf, 1%, XICON polyester film
C23	Capacitor, 0.001 uf, 1%, XICON polyester film
C24	Capacitor, 10 uf, 16 V, aluminum electrolytic
C25	Capacitor, 10 uf, 16 V, aluminum electrolytic
C26	Capacitor, 0.001, uf, 1% XICON polyester film
C27	Capacitor, 0.001, uf, 1% XICON polyester film
C28	Capacitor, 0.001, uf, 1% XICON polyester film
C29	Capacitor, 10 uf, 16 V, aluminum electrolytic
C30	Capacitor, 10 uf, 16 V, aluminum electrolytic
C31	Capacitor, 0.0068 uf, 5%, 50 V, polypropylene, Panasonic P series
C32	Capacitor, 0.033 uf, 5%, 50 V, metalized polyester film
C33	Capacitor, 0.022 uf, 5%, 50 V, metalized polyester film
C34	Capacitor, 0.15 uf, 5%, 50 V, metalized polyester film

C35 Capacitor, 0.22 uf, 5%, 50 V, metalized polyester film
C36 Capacitor, 0.18 uf, 5%, 50 V, metalized polyester film
C37 Capacitor, 0.12 uf, 5%, 50 V, metalized polyester film
C38 Capacitor, 220 pf, 10%, 50 V, ceramic
C39 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C40 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C41 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C42 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C43 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C44 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C45 Capacitor, 0.1 uf, 10%, 50 V, ceramic
C46 Capacitor, 220 pf, 10%, 50 V, ceramic
C47 Capacitor, 10 uf, 16 V, aluminum electrolytic
C48 Capacitor, 220 pf, 10%, 50 V, ceramic
C49 Capacitor, 220 pf, 10%, 50 V, ceramic
C50 Capacitor, 0.047 uf, 10%, 50 V, ceramic
C51 Capacitor, 100 uf, 16 V, aluminum electrolytic

D1 Diode, silicon, 1N4148

L1 Inductor, 3.9 mh, Toko 10RB, matched to L4
L2 Inductor, 27 mh, Toko 10RB, matched to L5
L3 Inductor, 18 mh, Toko 10RB, matched to L6
L4 Inductor, 3.9 mh, Toko 10RB, matched to L1
L5 Inductor, 27 mh, Toko 10RB, matched to L2
L6 Inductor, 18 mh, Toko 10RB, matched to L3
L7 Inductor, 33 mh, Toko 10RB
L8 Inductor, 33 mh, Toko 10RB
L9 Inductor, 33 mh, Toko 10RB
L10 Inductor, 120 mh, Toko 10RB

R1 Resistor, 100 ohms, 5%, 1/4 W, carbon film
R2 Resistor, 51 ohms, 5%, 1/4 W, carbon film
R3 Resistor, 22 ohms, 5%, 1/4 W, carbon film
R4 Resistor, 2.7k ohms, 5%, 1/4 W, carbon film
R5 Resistor, 3.3k ohms, 5%, 1/4 W, carbon film
R6 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R7 Resistor, 5.6k ohms, 5%, 1/4 W, carbon film
R8 Resistor, 100k ohms, 5%, 1/4 W, carbon film
R9 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R10 Resistor, 1k ohms, 5%, 1/4 W, carbon film
R11 Resistor, 51 ohms, 5%, 1/4 W, carbon film
R12 Resistor, 22 ohms, 5%, 1/4 W, carbon film
R13 Resistor, 2.7k ohms, 5%, 1/4 W, carbon film
R14 Resistor, 3.3k ohms, 5%, 1/4 W, carbon film
R15 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R16 Resistor, 5.6k ohms, 5%, 1/4 W, carbon film
R17 Resistor, 100k ohms, 5%, 1/4 W, carbon film

R18 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R19 Resistor, 1k ohms, 5%, 1/4 W, carbon film
R20 Resistor, 10k ohms, 1%, 1/4 W, metal film
R21 Resistor, 10k ohms, 1%, 1/4 W, metal film
R22 Resistor, 15k ohms, 1%, 1/4 W, metal film
R23 Resistor, 10k ohms, 1%, 1/4 W, metal film
R24 Resistor, 10k ohms, 1%, 1/4 W, metal film
R25 Resistor, 113k ohms, 1%, 1/4 W, metal film
R26 Resistor, 10k ohms, 1%, 1/4 W, metal film
R27 Resistor, 10k ohms, 1%, 1/4 W, metal film
R28 Resistor, 511k ohms, 1%, 1/4 W, metal film
R29 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R30 Resistor, 10k, potentiometer, PC mount, Panasonic MAG14
R31 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R32 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R33 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R34 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R35 Resistor, 10k ohms, 1%, 1/4 W, metal film
R36 Resistor, 10k ohms, 1%, 1/4 W, metal film
R37 Resistor, 52.3k ohms, 1%, 1/4 W, metal film
R38 Resistor, 10k ohms, 1%, 1/4 W, metal film
R39 Resistor, 10k ohms, 1%, 1/4 W, metal film
R40 Resistor, 232k ohms, 1%, 1/4 W, metal film
R41 Resistor, 10k ohms, 1%, 1/4 W, metal film
R42 Resistor, 10k ohms, 1%, 1/4 W, metal film
R43 Resistor, 649k ohms, 1%, 1/4 W, metal film
R44 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R45 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R46 Resistor, 500 ohms, potentiometer, audio taper, panel mount
R47 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R48 Resistor, 27k ohms, 5%, 1/4 W, carbon film
R49 Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R50 Resistor, 100k ohms, 5%, 1/4 W, carbon film
R51 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R52 Resistor, 1M ohms, 5%, 1/4 W, carbon film
R53 Resistor, 470 ohms, 5%, 1/4 W, carbon film
R54 Resistor, 27k ohms, 5%, 1/4 W, carbon film
R55 Resistor, 5.6k ohms, 5%, 1/4 W, carbon film
R56 Resistor, 33k ohms, 5%, 1/4 W, carbon film
R57 Resistor, 10k ohms, potentiometer, PC mount, Panasonic MAG14
R58 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R59 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R60 Resistor, 10k ohms, 5%, 1/4 W, carbon film
R61 Resistor, 4.7 ohms, 5%, 1/4 W, carbon film
R62 Resistor, 4.7 ohms, 5%, 1/4 W, carbon film
R63 Resistor, 150 ohms, 5%, 1/4 W, carbon film
R64 Resistor, 150 ohms, 5%, 1/4 W, carbon film
R65 Resistor, 1 ohms, 5%, 1/4 W, carbon film

R66 Resistor, 1 ohms, 5%, 1/4 W, carbon film
R67 Resistor, 10 ohms, 5%, 1/4 W, carbon film

Q1 Transistor, silicon NPN, 2N3904
Q2 Transistor, silicon NPN, 2N3904
Q3 Transistor, silicon NPN, 2N3904
Q4 Transistor, silicon NPN, 2N3904
Q5 Transistor, silicon NPN, 2N3904
Q6 Transistor, silicon NPN, 2N3904
Q7 Transistor, silicon FET, 2N5457
Q8 Transistor, silicon NPN, 2N3904
Q9 Transistor, silicon NPN, 2N3904
Q10 Transistor, silicon PNP, 2N3906
Q11 Transistor, silicon NPN, TIP29C
Q12 Transistor, silicon PNP, TIP30C

U1 Module, power splitter, Toko TK2518
U2 Module, mixer, Mini-Circuits SBL-1
U3 Module, mixer, Mini-Circuits SBL-1
U4 IC, linear, Philips NE5514
U5 IC, linear, Philips NE5514
U6 IC, linear, National LM387

By Vendor or Distributor Part Number (for purchasing)

Vendor	Part Number	Distributor	Dist PN	Qty	Reference Designators
Panasonic	ECQ-E1105KF	Digi-Key	EF1105	10	C1,11,43,44 (match C1 & C11 to 1%)
Panasonic	ECU-V1H102KBN	Digi-Key	PCC102BN	100	C2,12 (min order 100)
Panasonic	ECQ-E1155KF	Digi-Key	EF1155	10	C3,13 (match to 1%)
Panasonic	ECQ-E1185KF	Digi-Key	EF1185	10	C4,14 (match to 1%)
Panasonic	ECQ-E1565KF	Digi-Key	EF1565	10	C5,15 (match to 1%)
Panasonic	ECE-A16Z33	Digi-Key	P6618	4	C6,9,16,19
Panasonic	ECE-A16Z10	Digi-Key	P6616	11	C7,8,10,17,18,20,24,25, C29,30,47
Xicon		Mouser	140-PF2A102F	6	C21-23,26-28
Panasonic	ECQ-P1H682GZ	Digi-Key	P3682	1	C31
Panasonic	ECQ-V1H333JL	Digi-Key	P4519	1	C32
Panasonic	ECQ-V1H223JL	Digi-Key	P4517	1	C33
Panasonic	ECQ-V1H154JL	Digi-Key	P4527	1	C34
Panasonic	ECQ-V1H224JL	Digi-Key	P4529	1	C35
Panasonic	ECQ-V1H184JL	Digi-Key	P4528	1	C36
Panasonic	ECQ-V1H124JL	Digi-Key	P4526	1	C37
Panasonic	ECU-S1J221JCA	Digi-Key	P4028	4	C38,46,48,49
Panasonic	ECU-S1J104ZUA	Digi-Key	P4917	5	C39-42,45

Panasonic	ECU-S1J473ZUA	Digi-Key	P4916	5 C50
Panasonic	ECE-A16Z100	Digi-Key	P6620	4 C51

Rohm	1N4148	Mouser	592-1N4148	1 D1

Toko	181LY-392J	Digi-Key	TK4407	10 L1,4 (match to 1%)
Toko	181LY-273J	Digi-Key	TK4417	10 L2,5 (match to 1%)
Toko	181LY-183J	Digi-Key	TK4415	10 L3,6 (match to 1%)
Toko	181LY-392J	Digi-Key	TK4407	3 L7-9
Toko	181LY-124J	Digi-Key	TK4426	1 L10

Rohm	2N3904	Mouser	592-2N3904	6 Q1-Q6,8,9
National	2N5457	Digi-Key	2N5457-ND	1 Q7
Rohm	2N3906	Mouser	592-2N3906	6 Q10
Harris	TIP29C	Mouser	570-TIP29C	1 Q11
Harris	TIP30C	Mouser	570-TIP30C	1 Q12

TransOhm	29SJ250	Mouser	29SJ250-100	1 R1
TransOhm	29SJ250	Mouser	29SJ250-51	2 R2,11
TransOhm	29SJ250	Mouser	29SJ250-22	2 R3,12
TransOhm	29SJ250	Mouser	29SJ250-2.7K	2 R4,13
TransOhm	29SJ250	Mouser	29SJ250-3.3K	2 R5,14
TransOhm	29SJ250	Mouser	29SJ250-10K	9 R6,15,32,44,45, R47,58,59,60
TransOhm	29SJ250	Mouser	29SJ250-5.6K	3 R7,16,55
TransOhm	29SJ250	Mouser	29SJ250-100K	3 R8,17,50
TransOhm	29SJ250	Mouser	29SJ250-4.7K	6 R9,18,29,31,33,49
TransOhm	29SJ250	Mouser	29SJ250-1K	2 R10,19
TransOhm	29SJ250	Mouser	29SJ250-470	3 R34,51,53
TransOhm	29SJ250	Mouser	29SJ250-27K	2 R48,54
TransOhm	29SJ250	Mouser	29SJ250-1M	1 R52
TransOhm	29SJ250	Mouser	29SJ250-33K	1 R56
TransOhm	29SJ250	Mouser	29SJ250-4.7	2 R61,62
TransOhm	29SJ250	Mouser	29SJ250-150	2 R63,64
TransOhm	29SJ250	Mouser	29SJ250-1	2 R65,66
TransOhm	29SJ250	Mouser	29SJ250-10	1 R67
TransOhm	29MF250	Mouser	29MF250-10K	12 R20,21,23,24,26,27, R35,36,38,39,41,42
TransOhm	29MF250	Mouser	29MF250-15K	1 R22
TransOhm	29MF250	Mouser	29MF250-113K	1 R25
TransOhm	29MF250	Mouser	29MF250-511K	1 R28
TransOhm	29MF250	Mouser	29MF250-52.3K	1 R37
TransOhm	29MF250	Mouser	29MF250-232K	1 R40
TransOhm	29MF250	Mouser	29MF250-649K	1 R43
Bourns	96A1A-B24-D	Newark	87F2098-08	1 R46*
Panasonic	EVM-MAG01B14	Digi-Key	MAG14	2 R30,57

Toko	456DS-1012	Digi-Key	TK2518	1 U1

Mini-Circ	SBL-1	Dan's	SBL-1	2 U2,3
Philips	NE5514	Digi-Key	NE5514-ND	2 U4,5
National	LM387	Digi-Key	LM387N-ND	1 U6

* Substitute a 510 ohm 5% 1/4 watt fixed resistor paralleled with a 5K audio taper pot, Mouser 31VJ305 if desired.

From qrp-admin@Think.COM Tue Feb 22 10:53:38 1994
 Date: 22 Feb 1994 10:51:31 -0800
 From: "Bob Scott" <Bob_Scott@cpqm.saic.com>
 Subject: Radio Merit Badge Project

Radio Merit Badge Project

Disclaimer: I am not associated with Ten-Tec except as a customer.

Awhile ago, I wrote to you folks looking for ideas for a suitable project for the Boy Scout Radio Merit Badge. I received a number of excellent ideas, but I could not meet my goal of keeping the project under \$20.

I recently received the new Ten-Tec Kit catalog and they have a Regenerative 4-Band SWL Receiver that goes for \$17 plus shipping. The kit includes a drilled, painted, silk-screened front panel and covers the 49, 40, 31 meter bands plus 12-15 Mhz. Needs 9-12 volts, antenna and a pair of headphones (1/8" plug). Had pushbutton bandswitching, on-off switch, "on" LED, tuning, volume, regeneration control. They also have what they call a T-Kit Class-Pak which includes 5 #1054 receiver kits, instructor notes and spare-parts kit for \$79. This brings the cost down to around \$16 each.

I have one on order, but they will not be shipping until sometime in late March. If it is as good as it sounds, I will be using it for a Radio Merit badge class for my son's Scout Troop. I will let you know how it goes.

73

Bob AC4QO

From qrp-admin@Think.COM Thu Mar 3 12:59:01 1994
 Date: Thu, 3 Mar 94 09:41:14 PST
 From: GroverC@gvgadg.gvg.tek.com (Grover Cleveland)
 Subject: RadioKit 20m Travelradio

Hi Gang,

I am intrigued by the RadioKit 20M Travelradio" which was apparently featured in Ham Radio magazine (r.i.p.) in June of 1987.

If anyone has any experience with this radio, either building or operating, please let me know what you think.

73

Grover
WT6P

(Preserve the Mother Tongue - fie on "72" lidisms.)

From qrp-admin@Think.COM Sat Feb 26 20:20:19 1994
From: mvjfmvubr.att.com
Date: Sat, 26 Feb 94 20:10 EST
Subject: Sep. RX & TX

To tell if your RX and TX are on the same freq.
just key your TX while listening on the RX. You
will hear your signal if you are close to the TX
frequency..... Very Very Loud !!!

Make sure the antenna or dummy load is connected to TX !!!

From qrp-admin@Think.COM Fri Mar 4 16:39:07 1994
Date: Fri, 4 Mar 1994 14:40:11 -0700 (MST)
From: B61395@awtims.fe.anlw.anl.gov
Subject: short 40m antenna/QRP antennas

I'd like to offer one vote in favor of the "QRP antenna" concept, or at least some kind of EIRP definition of QRP. I've managed a few contacts on A0-13 running 25 watts, but with 1/4 wavelength ground planes for both uplink and downlink. I figure I had about 18 watts at the antenna, and the bird was about 35,000 km out, so this figures as more than 1000 mi/watt.

(by the way, that's ground planes, not ground plans...)

I think that somewhere in the early days, I probably have made a contact while running 100 watts to a dummy load too...

Well, just a thought -- any comments???

73 from Bill, KR8L (KR8L@WT7B.ID.USA.NA) dit dit

From qrp-admin@Think.COM Fri Mar 4 12:35:56 1994

Date: Fri, 4 Mar 1994 10:36:32 -0700 (MST)
From: B61395@awtims.fe.anlw.anl.gov
Subject: Shortest Random Wire on 40m -- Inefficiencies

Say, isn't that Gooches' theorem or some such: "RF gotta go somewhere..."

Bill, KR8L, MI QRP #M-98, NW QRP #127.

From qrp-admin@Think.COM Fri Mar 4 15:10:13 1994
Date: 05 Mar 1994 00:47:35 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Sierra

Can anyone tell me if the Sierra will be sold to QRPers outside of the USA?
How much will it cost and what are the features?

73 de Daniel

From qrp-admin@Think.COM Fri Mar 4 15:56:12 1994
Subject: Re: Sierra
Date: Fri, 04 Mar 94 15:56:26 EST
From: "John F. Woods" <jfw@ksr.com>

They said it's only available to members of NorCal, but you don't have to be in Northern California to join (I'm certainly not), though considering postage to 9V land, perhaps a subscription-free membership is more appropriate.

John, WB7EEL

From qrp-admin@Think.COM Sun Feb 27 22:59:44 1994
Date: Sun, 27 Feb 94 19:58:35 PST
From: dh@deneb.csustan.edu (Doug Hendricks)
Subject: Sierra Weekend

It was another good weekend for KI6DS. I have spent the last 3 weeks gathering parts and building the Sierra, Wayne Burdick's next offering for the NorCal QRP Club Project. Wayne ordered 3 prototype boards from Far Circuits, and he built number 1, and gave Bob Warmke, W6CYX, and myself the other two. He figures that by doing so he covers the extremes. Bob is an expert builder, engineer type. I am the worst. All thumbs, nothing I ever build works. So he has it covered. Both of us were to build the rig and keep notes on any abnormalities or problems encountered.

It took 2 and 1/2 weeks to find the parts, and only about 3 evenings for me to finish the Sierra. It has 160 parts, including the band module, and I built mine for 40 meters. The rig will be a kit from NorCal, and will only be sold to members. It will come complete with case, knobs & connectors, plus 5 band modules on 80, 40, 30, 20, & 15. The cost is projected to be in the \$250 range, but is not firm yet. When we are ready to take orders, we

will send a mailing to all NorCal members. DO NOT SEND ANY MONEY TO JIM CATES until you get your mailing. It will be a CW transceiver with 150 KHz coverage of all bands, and use plug in modules to change bands. By the way, you can change the module with the power on, and you can plug it in backwards without causing any problems. It took me 17 seconds to change modules the first time I tried. That is from cover on to cover back on.

Ok, back to the Sierra and this weekend. Friday night, I finished the rig and excitedly called Wayne on the phone to have him take me through the alignment procedure. That is where the problems began. My oscillator was there, then it was gone. Plus, my scope probe was acting up. I couldn't decide if the scope probe was bad or there was a problem with the Sierra. After an hour on the phone, I gave up. Wayne suggested that I bring the rig to San Carlos and we would debug it together. I agreed and that is where I spent Saturday.

Watching Wayne Burdick debug a rig is like watching a Roger Clemens throw a fastball. He is an artist at what he does. He took a couple of measurements on my rig, then got a puzzled look on his face. The next thing that he did was to take the bottom off. He grinned, said "Here's your problem." and pointed to the two leads of the VFO toroid that I had forgotten to clip. They were an inch long, and both of them were shorting to ground. Gosh was I red faced and embarrassed. Wayne clipped the two leads, and I had a rig that worked!! He aligned it, did some mods that he had figured out since ordering the prototype boards, and gave it back to me to use.

Today, I used the rig, and it is a dream. Puts out 3 watts with a 2N3553 final, has a hot receiver, and everyone that I work comments on how good it sounds. Speaking of that, it was amazing on the air. Everytime I finished a qso, someone else was calling me! They all wanted to know about the Sierra. My impression is that it is another winner from Wayne. I love it, and can't wait to get the rest of my band module boards so that I can get on the other bands. But, I will have to wait another 3 weeks for the special ordered crystals to arrive. (Now I know how all of you who have been waiting for your NorCals feel).

On the way home from Wayne's, I stopped by Bob Warmke's to show him the rig. He promptly hooked it up, and I was a witness to the first ever Sierra to Sierra QSO. We called Wayne on the repeater, and he gave Bob a call on 40 meters. What FUN! Bob couldn't wait to get started on finishing his Sierra, and as I left, he was plugging in the soldering iron. Today, he called me on the phone at 1:30 and we had a Sierra to Sierra QSO too. It was my first, and his second. The rig sounds great on the air, I know, because I have worked one. Another great QRP weekend in California. By the way, the Sierra will be at Dayton.

72, Doug

From qrp-admin@Think.COM Wed Feb 23 23:19:16 1994
Date: 24 Feb 1994 12:16:03 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: sockets and connectors

Hi,

I've noticed a number of homebrew txrx using RCA connectors. Do these incur loss? If not, why is the PL-259 more popular (expensive too)?

Also, does anyone know what a S0-239 socket looks like? Is it a version of BNC or the S0-259?

73 de 9V Daniel

From qrp-admin@Think.COM Fri Feb 25 23:57:45 1994
Date: Fri, 25 Feb 1994 20:49:24 -0800
From: ROHRWERK@holonet.net
Subject: sockets and connectors

On 02-24-94, ASIRENE@v9001.ntu.ac.sg wrote to qrp@Think.COM:

>-----

I've noticed a number of homebrew txrx using RCA connectors. Do these incur loss? If not, why is the PL-259 more popular (expensive too)?

Also, does anyone know what a S0-239 socket looks like? Is it a version of BNC or the S0-259?

73 de 9V Daniel

>-----

RCA plugs are cheaper, that's why they're used! Of course, you get what you pay for.

Actually, the BNC is the classiest connector for most uses except maybe higher power amplifiers.

The S0239 is the panel receptacle for the PL259. Usually has a square mounting flange with 4 holes in it.

John K0JD

* Freddie 1.2.5 * "Aaaaaahhhhhh.....Baaaaach!" -- Radar O'Reilly

From qrp-admin@Think.COM Wed Mar 2 13:26:48 1994
Date: Wed, 02 Mar 94 13:25:38 EST
From: BUHYOFF@VTVM1.CC.VT.EDU
Subject: SOLD - Schurr paddle and Curtis Keyer

K5 Curtis Keyer and Schurr paddle are SOLD. Thanks to the many who responded. 73, Greg KN4FR

From qrp-admin@Think.COM Fri Mar 4 09:53:17 1994
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Spread Spectrum
Date: Fri, 4 Mar 94 9:47:25 EST

I once designed and built a spread spectrum rig.
It did digital voice on the 70 cm band.
I never believed it would work until it did.
And it worked at just the right time too, when my professor was looking.
If you write a 120 page research paper to go along with the project,
and defend it against a bunch of PHD's who love to ask hard questions,
and do all the associated course work, maybe the local engineering
college will give you a MSEE.

Anyway, I have thought about designing a spread spectrum CW rig.
It seems kind of silly to combine spread spectrum technology with CW.
But, the CW rate is so slow that a large process gain is possible.
Such a system could almost be immune to just about anything.

If I were to design a SSCW (Spread Sprectrum CW, actually it should be
called spread spectrum Morse code, but I like SSCW) rig I would design
it for the 10 m band. Then I can use a transverter to get to 70 cm
until they change the rules.

I would also use direct sequence. I think direct sequence is easier
to do even though it might be harder to understand than frequency hopping.

73,

Jim, WD9EYB

From qrp-admin@Think.COM Fri Mar 4 12:57:32 1994
Date: Fri, 4 Mar 1994 12:13:03 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: Re: Spread Spectrum

> I once designed and built a spread spectrum rig.
> It did digital voice on the 70 cm band.
> I never believed it would work until it did.
> And it worked at just the right time too, when my professor was looking.
> If you write a 120 page research paper to go along with the project,
> and defend it against a bunch of PHD's who love to ask hard questions,
> and do all the associated course work, maybe the local engineering

> college will give you a MSEE.
>
> Anyway, I have thought about designing a spread spectrum CW rig.
> It seems kind of silly to combine spread spectrum technology with CW.
> But, the CW rate is so slow that a large process gain is possible.
> Such a system could almost be immune to just about anything.
>
> If I were to design a SSCW (Spread Spectrum CW, actually it should be
> called spread spectrum Morse code, but I like SSCW) rig I would design
> it for the 10 m band. Then I can use a transverter to get to 70 cm
> until they change the rules.
>
> I would also use direct sequence. I think direct sequence is easier
> to do even though it might be harder to understand than frequency hopping.
>
> 73,
>
> Jim, WD9EYB
>
SSCW ... I like that! Sounds like you have more experience than me for sure
with this. I never built anything, but always wanted to. I don't think I want
to write any more MSEE stuff, I did that route a while back, and have had enough.

But really now, I think with this SSCW (note: I'm using the term), that QRP
could really abound in the congested bands. The concept of 10 meters for the
freq is good.

Oh well, I hope this discussion isn't boring the people here on this list, but
i didn't want to exclude the list from this discussion because it would
be applicable to QRP.
73 all Brad WB8YGG

From qrp-admin@Think.COM Thu Feb 24 23:11:59 1994
Date: Thu, 24 Feb 1994 23:03:44 -0500 (EST)
From: "Andrew M. Cohn" <andy@clark.net>
Subject: Suggestion re Operating Announcements

QuiRPs:

I think it's a neat idea to post operating schedules so we can try to
QS0, but it might be helpful (at least for me) if you let us know your
city and state, so we can aim our beams, etc. Your locations are not
always obvious from your usernames, and it will save us the time of
looking up your call and address, neither of which is always an accurate
indicator of where you live right now! Sowaddyathink? 72, andy,k4adl

From qrp-admin@Think.COM Fri Feb 25 09:44:03 1994
From: jpo@acd4.acd.com (Jim Osburn)
Subject: Re: Suggestion re Operating Announcements (QRP in The Park)
Date: Fri, 25 Feb 94 8:53:47 EST

Andy,

Good idea.

I'm going to the park tomorrow (Saturday) to do some QRP.
I will be tuning around 15 m and 20 m from 1:00 PM until 4:00 PM EST.
I'm located in Terre Haute, Indiana, which is in west central Indiana.
That's about 87 degrees, 20 minutes, west longitude and 39 degrees,
25 minutes north latitude.

73,

Jim, WD9EYB

>
> QuiRPs:
>
> I think it's a neat idea to post operating schedules so we can try to
> QSO, but it might be helpful (at least for me) if you let us know your
> city and state, so we can aim our beams, etc. Your locations are not
> always obvious from your usernames, and it will save us the time of
> looking up your call and address, neither of which is always an accurate
> indicator of where you live right now! Sowaddyathink? 72, andy,k4adl
>
>

From qrp-admin@Think.COM Sat Feb 26 11:43:25 1994
Date: 27 Feb 1994 00:40:35 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: Super-glue for holding coils?

Hi,

I am in the middle of constructing my ARK 20 kit, and would like to
know if I can use Super-glue instead of Q-dope?

73 de 9V Daniel

From qrp-admin@Think.COM Sat Feb 26 12:27:26 1994
Subject: Re: Super-glue for holding coils?
Date: Sat, 26 Feb 94 12:27:10 EST
From: "John F. Woods" <jfw@ksr.com>

> I am in the middle of constructing my ARK 20 kit, and would like to
> know if I can use Super-glue instead of Q-dope?

Probably, though I don't know for sure; the resulting Q may or may not be OK (and few people have enough superglue on hand for a convincing "microwave test" :-). Another readily-available alternative is clear nail polish (which isn't as brittle as dried superglue, either).

From qrp-admin@Think.COM Fri Feb 25 10:21:01 1994
Date: Fri, 25 Feb 1994 08:56:07 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: superhet design

I'm not sure if this one made it out to the list server or not, but here it is again..

I'm wondering if anybody has, or knows of a design for a superhet transceiver that uses the tx mixer for the rx mixer, and a sidetone oscillator instead of the derived transmitted signal.

The reason I ask is that it seems that in the nn1g and other superhet designs that a technique for switching over the function of e.g. and ne602 could be done. Why I don't know, maybe to save on more expensive parts so we could make a qrp rig offshore for \$10.00 and sell them for \$25.00 :-)

Anyway, any thoughts? If I get some time I might experiment. (Big if these days) .. 73
Brad WB8YGG..

From qrp-admin@Think.COM Wed Feb 23 10:02:37 1994
Date: Wed, 23 Feb 94 09:00:37 CST
From: rand@zeta.sps.mot.com (Rand Gray)
Subject: T2 Parts List

Hi QRP'ers,

Here is the parts list for Rick Campbell's T2 multimode phasing exciter.

Again, I have organized it for board stuffing and purchasing parts, with Mouser and Digi-Key part numbers listed. Also note that the Mini-Circuit parts may be obtained from Dan's Small Parts.

73,

Rand W1GYN

-----CUT HERE-----CUT HERE-----

Parts List for Rick Campbell's T2 Board

Prepared by Rand Gray, W1GYN, rand@zeta.sps.mot.com

22 Feb 94, Original

By Reference Designator (for board stuffing)

RefDes Description

C1	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C2	Capacitor, 10 uf, 16 V, aluminum electrolytic
C3	Capacitor, 10 uf, 16 V, aluminum electrolytic
C4	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C5	Capacitor, 0.022 uf, 10%, 50 V, ceramic
C6	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C7	Capacitor, 0.68 uf, 5%, 50 V, metalized polyester film
C8	Capacitor, 0.68 uf, 5%, 50 V, metalized polyester film
C9	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C10	Capacitor, 33 uf, 16 V, aluminum electrolytic
C11	Capacitor, 1 uf, 5%, 50 V, metalized polyester film
C12	Capacitor, 1 uf, 5%, 50 V, metalized polyester film
C13	Capacitor, 0.068 uf, 5%, 50 V, metalized polyester film
C14	Capacitor, 0.18 uf, 5%, 50 V, metalized polyester film
C15	Capacitor, 0.068 uf, 5%, 50 V, metalized polyester film
C16	Capacitor, 0.001 uf, 1%, XICON polyester film
C17	Capacitor, 0.001 uf, 1%, XICON polyester film
C18	Capacitor, 0.001 uf, 1%, XICON polyester film
C19	Capacitor, 100 uf, 16 V, aluminum electrolytic
C20	Capacitor, 33 uf, 16 V, aluminum electrolytic
C21	Capacitor, 0.001 uf, 1%, XICON polyester film
C22	Capacitor, 0.001 uf, 1%, XICON polyester film
C23	Capacitor, 0.0027 uf, 1%, XICON polyester film
C24	Capacitor, 33 uf, 16 V, aluminum electrolytic
C25	Capacitor, 0.001 uf, 10%, 50 V, ceramic
C26	Capacitor, 0.1 uf, 10%, 50 V, ceramic
C27	Capacitor, 0.001 uf, 10%, 50 V, ceramic
C28	part of RF low pass filter, see article
C29	part of RF low pass filter, see article
C30	part of RF low pass filter, see article

D1	Diode, silicon, 1N4148
D2	Diode, silicon, 1N4148
D3	Diode, silicon, 1N4148
D4	Diode, silicon, 1N4148
D5	Diode, silicon, 1N4148
D6	Diode, silicon, 1N4148

L1	Inductor, 120 mh, Toko 10RB
L2	Inductor, 33 mh, Toko 10RB
L3	Inductor, 33 mh, Toko 10RB
L4	Inductor, 120 mh, Toko 10RB
L5	part of RF low pass filter, see article
L6	part of RF low pass filter, see article

R1	Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R2	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R3	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R4	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R5	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R6	Resistor, 4.7k ohms, 5%, 1/4 W, carbon film
R7	Resistor, 100k ohms, 5%, 1/4 W, carbon film
R8	Resistor, 100k ohms, 5%, 1/4 W, carbon film
R9	Resistor, 33k ohms, 5%, 1/4 W, carbon film
R10	Resistor, 33k ohms, 5%, 1/4 W, carbon film
R11	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R12	Resistor, 680 ohms, 5%, 1/4 W, carbon film
R13	Resistor, 680 ohms, 5%, 1/4 W, carbon film
R14	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R15	Resistor, 470 ohms, 5%, 1/4 W, carbon film
R16	Resistor, 10k ohms, 5%, 1/4 W, carbon film
R17	Resistor, 470 ohms, 5%, 1/4 W, carbon film
R18	Resistor, 470 ohms, 5%, 1/4 W, carbon film
R19	Resistor, 1k ohms, 5%, 1/4 W, carbon film
R20	Resistor, 10k ohms, 1%, 1/4 W, metal film
R21	Resistor, 10k ohms, 1%, 1/4 W, metal film
R22	Resistor, 15k ohms, 1%, 1/4 W, metal film
R23	Resistor, 10k ohms, 1%, 1/4 W, metal film
R24	Resistor, 10k ohms, 1%, 1/4 W, metal film
R25	Resistor, 113k ohms, 1%, 1/4 W, metal film
R26	Resistor, 10k ohms, 1%, 1/4 W, metal film
R27	Resistor, 10k ohms, 1%, 1/4 W, metal film
R28	Resistor, 511k ohms, 1%, 1/4 W, carbon film
R29	Resistor, 1k ohms, 5%, 1/4 W, carbon film
R30	Resistor, 150 ohms, 5%, 1/4 W, carbon film
R31	Resistor, 10k ohms, 1%, 1/4 W, metal film
R32	Resistor, 10k ohms, 1%, 1/4 W, metal film
R33	Resistor, 52.3k ohms, 1%, 1/4 W, metal film
R34	Resistor, 10k ohms, 1%, 1/4 W, metal film
R35	Resistor, 10k ohms, 1%, 1/4 W, metal film
R36	Resistor, 232k ohms, 1%, 1/4 W, metal film
R37	Resistor, 10k ohms, 1%, 1/4 W, metal film
R38	Resistor, 10k ohms, 1%, 1/4 W, metal film
R39	Resistor, 649k ohms, 1%, 1/4 W, metal film
R40	Resistor, 1k ohms, 5%, 1/4 W, carbon film

R41 Resistor, 150 ohms, 5%, 1/4 W, carbon film
R42 Resistor, 2.7k ohms, 5%, 1/4 W, carbon film
R43 Resistor, 100 ohms, 5%, 1/4 W, carbon film
R44 Resistor, 270 ohms, 5%, 1/4 W, carbon film

Q1 Transistor, silicon PNP, 2N3906
Q2 Transistor, silicon PNP, 2N3906
Q3 Transistor, silicon NPN, 2N3904
Q4 Transistor, silicon NPN, 2N3904

U1 IC, Philips NE5532
U2 IC, Philips NE5514
U3 IC, Philips NE5514
U4 Module, mixer, Mini-Circuits SBL-1
U5 Module, mixer, Mini-Circuits SBL-1
U6 Module, power splitter, Toko TK2518
U7 50 ohm amplifier, Mini-Circuits MAR-2

By Vendor or Distributor Part Number (for purchasing)

Vendor	Part Number	Distributor	Dist PN	Qty	Reference Designators
Panasonic	ECU-S1J104ZUA	Digi-Key	P4917	5	C1,4,6,9,26
Panasonic	ECE-A16Z10	Digi-Key	P6616	2	C2,3
Panasonic	ECU-S1J223ZUA	Digi-Key	P4915	1	C5
Panasonic	ECQ-V1H684JL	Digi-Key	P4673	2	C7,8
Panasonic	ECE-A16Z33	Digi-Key	P6618	3	C10,20,24
Panasonic	ECQ-V1H105JZ	Digi-Key	P4537	2	C11,12
Panasonic	ECQ-V1H683JL	Digi-Key	P4523	2	C13,15
Panasonic	ECQ-V1H184JL	Digi-Key	P4528	1	C14
Xicon		Mouser	140-PF2A102F	6	C16-18,21,22
Panasonic	ECE-A16Z100	Digi-Key	P6620	1	C19
Xicon		Mouser	140-PF2A272F	6	C23
Panasonic	ECU-S2A102KBA	Digi-Key	P4898	2	C25,27
Rohm	1N4148	Mouser	592-1N4148	6	D1
Toko	181LY-124J	Digi-Key	TK4426	2	L1,4
Toko	181LY-333J	Digi-Key	TK4418	2	L2,3
Rohm	2N3906	Mouser	592-2N3906	2	Q1,2
Rohm	2N3904	Mouser	592-2N3904	2	Q3,4
TransOhm	29SJ250	Mouser	29SJ250-4.7K	2	R1,6
TransOhm	29SJ250	Mouser	29SJ250-10K	7	R2,3,4,5,11,14,16
TransOhm	29SJ250	Mouser	29SJ250-100K	2	R7,8

TransOhm	29SJ250	Mouser	29SJ250-33K	2 R9,10
TransOhm	29SJ250	Mouser	29SJ250-680	2 R12,13
TransOhm	29SJ250	Mouser	29SJ250-470	3 R15,17,18
TransOhm	29SJ250	Mouser	29SJ250-1K	3 R19,29,40
TransOhm	29SJ250	Mouser	29SJ250-150	2 R30,41
TransOhm	29SJ250	Mouser	29SJ250-2.7K	2 R42
TransOhm	29SJ250	Mouser	29SJ250-100	1 R43
TransOhm	29SJ250	Mouser	29SJ250-270	1 R44
TransOhm	29MF250	Mouser	29MF250-10K	12 R20,21,23,24,26,27, R31,32,34,35,37,38
TransOhm	29MF250	Mouser	29MF250-15K	1 R22
TransOhm	29MF250	Mouser	29MF250-113K	1 R25
TransOhm	29MF250	Mouser	29MF250-511K	1 R28
TransOhm	29MF250	Mouser	29MF250-52.3K	1 R33
TransOhm	29MF250	Mouser	29MF250-232K	1 R36
TransOhm	29MF250	Mouser	29MF250-649K	1 R39

Philips	NE5532	Digi-Key	NE5532-ND	1 U1
Philips	NE5514	Digi-Key	NE5514-ND	2 U2,3
Mini-Circ	SBL-1	Dan's	SBL-1	2 U4,5
Toko	456DS-1012	Digi-Key	TK2518	1 U6
Mini-Circ	MAR-2	Dan's	MAR-2	1 U7

From qrp-admin@Think.COM Mon Feb 28 10:08:03 1994
 Date: Mon, 28 Feb 94 09:57:01 EST
 From: "Ronald D. Rossi" <rrossi@vnet.IBM.COM>
 Subject: Ten-Tec OMNI-D

Hello,

I am new to this group. I have been monitoring for about two weeks now. Quite a bit of activity here. Anyway I just upgraded to extra from tech Saturday and don't own an HF rig. I have the opportunity to purchase a Ten-Tec OMNI-D and wondered what the QRP community had to say about this unit? I would like to operate CW mostly. I didn't get to try out the rig and have very limited experience with HF in general. Even though I am not crowded by neighbors too much I will probably run QRP most of the time (I have to say "most of the time" to be honest) to keep RFI to a minimum.

The rig comes with all the optional filters, power supply and keyer.

THANKS in advance.

ron

Ron Rossi

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/=====/  
/ IBM Microelectronics      Internet:  rrossi@vnet.ibm.com  /  
/ H/P ASIC SRAM Design     VNET:    RROSSI at BTVLABVM    /  
/ Dept N93 Bldg 861-2      Voice:    802/769-7477        /  
/ 1000 River Road         RF:      N1PBT/AE              /  
/ Essex Junction, VT 05452-4299                        /  
/                                                                /  
/ "I work for IBM, I don't represent its views!"        /  
/                                                                /  
/=====/
```

From qrp-admin@Think.COM Mon Feb 28 16:09:12 1994
Date: Mon, 28 Feb 1994 15:47:00 -0500 (EST)
From: ALAN HICKS 617-860-4388 <HICKS.ALAN@epamail.epa.gov>
Subject: Ten-Tec Omni-D

Ron Rossi asked about the Ten-Tec Omni-D as a QRP rig.

I have the analog display model A Omni, also with a full complement of filters. I find it an excellent rig and use it for QRP CW frequently. It also has a lot of audio punch when operated QRO on SSB. The rig includes the 160 M band which can be a lot of fun if you have the room for the antennas. I have successfully added the 30 meter and 12 meter band upgrade kits to mine, but apparently no 17 meter kit is available. You'll want to see if the one you're buying has the additional bands already installed. When shipped from the factory, only the 30 meter receive function was available. BTW, the total cost of the upgrade for both bands was about \$25 for do-it-your-self types, and the Ten-Tec service folks are GREAT. Good luck es 73 de KD1DJ,

Alan Hicks
US EPA
Lexington, MA 02173

"All the world's a stage and most of us will grow out of it."

From qrp-admin@Think.COM Tue Mar 1 07:57:29 1994
Date: Tue, 1 Mar 94 07:56:43 EST
From: "Ronald D. Rossi" <rrossi@vnet.IBM.COM>
Subject: Ten-Tec OMNI-D

Thank you for all the responses both e-mail in the group. I did decide to buy the rig. How could I pass it up for \$370. I won't be picking it up until Wednesday after work. The previous owner was not able to tell me whether it was a "B" or "C" model and I didn't know what clues to give him to look for, but it does have the full compliment of filters. The only down-side comment I received was that the receiver has a few birdies. The QST review from 01/80 mentions these as well and they are reportedly documented in the manual (which come with the units as well).

Chirp with a you on the air...soon I hope. I will be very tempted to brave our cold NE weather to get some kind of antenna up and hell I may even just load up my 11e 2m beam!!

ron

Ron Rossi

```
/=====/  
/ IBM Microelectronics           Internet:  rrossi@vnet.ibm.com  /  
/ H/P ASIC SRAM Design          VNET:    RROSSI at BTVLABVM    /  
/ Dept N93 Bldg 861-2           Voice:    802/769-7477      /  
/ 1000 River Road              RF:      N1PBT/AE          /  
/ Essex Junction, VT 05452-4299 /  
/                               /  
/ "I work for IBM, I don't represent its views!" /  
/                               /  
/=====/
```

From qrp-admin@Think.COM Mon Feb 28 13:20:59 1994
Subject: Re: Ten-Tec OMNI-D
Date: Mon, 28 Feb 1994 09:59:38 -0800
From: Clark Savage Turner WA3JPG <turner@safety.ICS.UCI.EDU>

Hi Ron:

The OMNI-D is a fine radio, if a bit primitive by today's standards. QRP is easy on CW: you merely turn down the ALC and DRIVE until your wattmeter says what you want it to. It is relatively stable there.

The OMNI-D had several models, the first, plane jane, the Series B and the Series C. The Series C is the one I had in my shack for a while, and I suspect not a whole lot of difference.

You can have some IF filters, and there are also audio filters. The combination is very wonderful for CW. Make sure "loaded" with filters means a full complement of each. It is a fine receiver. NO PBT or IF Shift, though, but that is not so important there on CW with the narrow

filters you will have. You will occasionally miss it on SSB, though.

It is an easy radio to work on, and Ten Tec still supports them. Make sure you get a manual. I believe a good OMNI-D series C with supply and keyer should be worth somewhere around \$400 - \$500, but that is just a guess. I sold my mint OMNI-C for \$400 with all filters and stuff, and the fellow I sold it to felt good about the price, and I was fine with it. He'll give it a good home :-).

Feel free to write back to me personally for any other questions.

Clark
WA3JPG

From qrp-admin@Think.COM Mon Feb 28 15:37:21 1994
Date: Mon, 28 Feb 94 12:43:06 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.hf.intel.com>
Subject: Ten-Tec QRP Gear FOR SALE

Text item: Text_1

Following items still for sale, until I take them to next weekends hamfest.

Ten-Tec Century 21 (SOLD)

Ten-Tec Argonaut 509

- 80-10 CW/SSB Transceiver
- 5W or less output via pot adjustment
- Superhet Receiver
- Full break-in keying
- Very Good Condition
- Manual

Ten-Tec FR4 Passive Audio Filter (SSB->CW)

Ten-Tec 210 AC->DC Power Supply

Ten-Tec 206A Matching Crystal Calibrator

Home-brew Active CW Filter

All - \$330

OHR-20

- 20M CW only (14.000-14.080)

- Abt 3W output
- Superhet Receiver
- Built in wide/narrow filter & RIT
- Optional RF preamp installed
- Manual
- 2 years old

\$120

=====
If interested please respond here on e-mail or call before
0000Z @ (602) 554-8574 weekdays, and (602) 839-8677 weekends.
=====

73, Mark de W07T/QRP

From qrp-admin@Think.COM Mon Feb 28 12:12:43 1994
Date: Mon, 28 Feb 94 06:35:52 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.hf.intel.com>
Subject: Re: Ten-Tec QRP Gear FOR SALE

Text item: Text_1

Following items still for sale, until I take them to
next weekends hamfest.

Ten-Tec Century 21

- 80-10 CW Only Transceiver
- 70W input
- Double Direct Conversion RCV
- 3 Built-in RCV Filters (2.5khz, 1.0khz, 500hz)
- Built in AC->DC power supply
- Very Good Condition
- Manual
- \$180

Ten-Tec Argonaut 509

- 80-10 CW/SSB Transceiver
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73, Mark de W07T/QRP

From qrp-admin@Think.COM Mon Feb 28 16:30:47 1994
Date: Mon, 28 Feb 94 06:35:52 PST
From: Mark E Gustoff <Mark_E_Gustoff@ccm.hf.intel.com>
Subject: Re: Ten-Tec QRP Gear FOR SALE

Text item: Text_1

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0000Z @ (602) 554-8574 weekdays, and (602) 839-8677 weekends.
=====

73, Mark de W07T/QRP

From qrp-admin@Think.COM Mon Feb 21 15:37:47 1994

Date: Mon, 21 Feb 94 10:37:36 HST

From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>

Subject: the 599 report

>ME.... W1FMR W1FMR

>DX... W1 ??

(Ooohmy God, can it be me ? please please!)

>ME.... W1FMR W1FMR

>DX... W1MR ?? (It's me It's me It's me Ooooh !!)
>ME.... W1FMR W1FMR W1FMR k
>DX... W1FMR 5NN (Yeooow ...wake up the neighbors !!!)
^^^

That guy must have been on auto-pilot! He missed your call twice and still gave you a 599? He must have been sending with crossed fingers...

73,
Jeff

=====
Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRPp transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)
NMC6 (U.S. Coast Guard Group Monterey)

It is said that CW is the second most popular mode on HF, but scanning the bands I frequently count more CW QSOs than SSB QSOs.

=====
From qrp-admin@Think.COM Fri Mar 4 09:24:54 1994
Date: Fri, 4 Mar 1994 09:15:34 -0500 (EST)
From: "Andrew M. Cohn" <andy@clark.net>
Subject: The shortest random wire on 40m?

Gang,

Knowing full well that a random wire of around 33 feet will work fine on 40, I am just curious to find out what you've had success with in terms of shorter antenna wires. For example, have you ever loaded up a 15 foot wire and made any contacts? What about a 10 foot wire (or am I becoming absurd at this point?).

Absurdly yours,
andy, k4adl

PS: Normally I would try to figure this out for myself, except that my qrp rig hasn't arrived yet!

From qrp-admin@Think.COM Fri Mar 4 10:36:32 1994
From: alsun150!jvm@aluxs.att.com
Date: Fri, 4 Mar 94 10:06:23 EST
Subject: Re: The shortest random wire on 40m?

>
> Knowing full well that a random wire of around 33 feet will work fine on
> 40, I am just curious to find out what you've had success with in terms
> of shorter antenna wires. For example, have you ever loaded up a 15 foot
> wire and made any contacts? What about a 10 foot wire (or am I becoming
> absurd at this point?).
>
> Absurdly yours,
> andy, k4adl
>

The strangest and most electrically small antenna I ever used was my window screen on 75m SSB. I twisted some speaker wire into the screen in a couple of spots and jammed the other end into the back of the swr meter. My intention was just to listen to the VSBN (Virginia Sideband Net).

Just for the heck of it, I decided to check the SWR, and found that remarkably and inexplicably it was 1:1!!! (Maybe there was so much rf in the shack that the meter was reading wrong!) Anyway, since there was such a good match, I decided to transmit. I wasn't expecting much, but I did manage to check into the VSBN. I wasn't loud, but they could hear me!!!

Now, this was not QRP... I used an HW-12A heathkit, which runs about 100w. And it was a 2nd story window. But I think it was about the time it dawned on me what just a little bit of rf could do!

I guess the moral of this story is that in almost every antenna situation, *some* rf is radiated, and if *any* rf is radiated, *somebody* can hear you! So the potential exists for making contacts almost no matter what antenna you use, or how much/little power you run. However, using low power and poor antennas both contribute to weaken your signal. If you weaken it so far that hardly anyone can hear it, you don't make many contacts, and don't have much fun! So I guess everyone runs the power down, but likes to use the most efficient antenna he/she can afford/erect.

On another angle: An antenna I've been wanting to try is a small loop. I've been collecting literature articles for a long time, and I think it might be fun to try putting one of those together. They are fairly efficient if losses can be kept small, and the small physical size is very attractive. One disadvantage is that the bandwidth is very small because the Q is very high.

Enough of this rambling! Have fun & 73,

Jim Morgan WX4D jvm@aluxpo.att.com

From qrp-admin@Think.COM Fri Mar 4 11:47:37 1994

Date: Fri, 04 Mar 94 11:48:08 EST
From: "John F. Woods" <jfw@ksr.com>

> While flipping through the March 1994 QST, I happened across an article from
> MFJ on page 157 for a book entitled "Solid State QRP Projects". It is
> described as "52 QRP projects in 8 chapters". Does anyone already have
> this book. Is it a collection of "new" projects or a rehash of old project?

Looking really closely at the ad, I note that it is described as "Reprints of older classics by Ed Noll, W3FQJ" (along with "FET Principles, Experiment and Projects"). So, nothing new was written for the book they're selling; I don't know whether or not it overlaps with anything in other books you might have. (I'm awfully tempted to get it just to convince them that there's interest in QRP homebrewing...)

73, John, WB7EEL

From qrp-admin@Think.COM Fri Mar 4 14:40:41 1994
Date: 04 Mar 1994 14:38:36 -0500 (EST)
From: "D A Coleman (ext. 2850)" <DACOLEMAN@fair1.fairfield.edu>
Subject: Re: The shortest random wire on 40m?

We'll allow you to tell that window-screen story on this net; after all, weren't you using a qrp antenna?

72.838499121

Don Coleman, W1VOQ

From qrp-admin@Think.COM Mon Feb 21 09:49:26 1994
Date: Mon, 21 Feb 1994 09:41:12 -0500 (EST)
From: "Andrew M. Cohn" <andy@clark.net>
Subject: Top 10 Criteria for Homebrew

QuiRPs,

All the chatter about what "homebrew" really means has been very confusing. So I have taken the liberty of simplifying and summarizing, thus creating...

K4ADL's TOP 10 CRITERIA FOR CALLING YOUR STATION "HOMEBREW"

10. A credit card was not used to purchase any equipment.

9. You did not call a plumber to install the ground rod.

8. You removed the "Made in Japan" sticker from the transmitter.
7. Your equipment arrived via parcel post rather than FedEx Overnight.
6. Your CQ-to-response ratio is at least 100 to 1.
5. Each QSL card you send out is hand lettered in calligraphy.
4. You personally lick the postage stamps for your QSL cards.
3. You reduce your output to 10 mw and STILL cause TVI.
2. At least one of the rubber feet from the bottom of the rig is missing.

AND THE NUMBER 1 CRITERIA FOR CALLING YOUR STATION "HOMEBREW"...

1. Your station's antenna is totally independent of your neighbor's cable TV system.

;->

From qrp-admin@Think.COM Fri Feb 25 17:39:46 1994
Date: Fri, 25 Feb 94 11:56 EST
From: Paul Ermisch <0003167728@mcimail.com>
Subject: UK parts/kits supplier (Cirkit)

Thanks to all for the parts supplier recommendations. Also, thanks for the concern regarding EMail costs but I get my mail through work (and I work for MCI ;)

Regarding the Cirkit outfit I'd mentioned:

Cirkit
Park Lane, Broxbourne, Herts EN10 7NQ
Sales (0992) 448899
Info (0992) 441306
Fax (0992) 471314

(I think telephone country code for UK is 44)

Catalog is 1.9 pounds -- I think I paid about \$5 after exchange and shipping. They accept VISA and AMEX. I originally found them listed in a QST back-issue I was perusing at the library.

What I received was a catalog about .5" thick with a slick, full-color cover. The cover states "components - kits - test equipment". Books, tools, receivers, security equipment are also included. Nice clear pictures (as clear as can be on newsprint) of almost everything listed. Minimum quantities on small stuff looks as low as three (varies, of course).

Pre-built modules include:

tuner sets, FM tunerheads and amps, IF amps, digital frequency meters and counters, TV/Video amps and modulators, power supplies, audiophile components (equalizers, preamps, VU meters, etc.)

Kits include:

RC14 DC receiver (14MHZ), 3.5Mhz converter for RC14, 80M receiver, HF linear amp, HF preamp, 1.8-30Mhz QRP PA (3W), low-pass cascade filter, ATU, 2M to 80M transverter, DSB80/160 XCVR, minisynth PLL VFO, active SSB/CW filter, speech processor, CMOS keyer, 6M transverter, 4M/6M PA, 6M to 2M/10M converter, UoSat/2M receiver, 2M XCVR, 2M PA, various audio preamps and amps, car and home gadgets, dip meter, signal and frequency test generators

It's fun just to browse this catalog. I haven't gotten many part/kits catalogs so far but this is the most visually stimulating so far. Again, I'm sure most of the stuff can be had locally. The 2 meter XCVR was interesting - TX and RX are actually separate boards that can be purchased separately (\$57 and \$65 respectively after exchange). They are 6-channel rigs -- don't know much about it yet but could these be used for a cheap packet setup? Did I also mention they have a sense of humor? Some of the gadget kit descriptions are pretty funny.

Paul Ermisch, KB0LUR
permisch@mcimail.com

From qrp-admin@Think.COM Tue Feb 22 16:18:46 1994
From: alsun150!jvm@aluxs.att.com
Date: Tue, 22 Feb 94 15:46:29 EST
Subject: Wanted: QEX back issues

Anybody have any back issues of QEX that you'd consider parting with ?

Tnx & 73,

Jim Morgan WX4D/3 jvm@aluxpo.att.com
(610)770-2663

From qrp-admin@Think.COM Fri Feb 25 09:43:54 1994
Date: Fri, 25 Feb 94 06:43:22 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: WAS Award!!

Gang,

this was so neat that i just had to get up from the desk,
bop across the house, sit down at another desk where the
workstation is located, dial to CA then to TX to post this
tidbit.

i got an application from a QRP ARCI member for the WAS (Worked
All States) award. nothing unusual about this until i looked
at his list!!

it is

WAS Single Band 80M Single Mode SSB Single Power 5W Single Frequency
3.768MHz

this is the Geritol Net (which I have NEVER checked into, so no cute
remarks Doug) :-) ;-)

this achievement was done in three months time, Oct-Dec of last year.
OK, add

Single Year.

Guess we have to race to get endorsements for

Single Month (the above is really single quarter too)
Single Day
Single Hour

:-) :-) above presented for you amusement. don't take life too seriously.

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Fri Feb 25 11:30:02 1994
Subject: Re: WAS Award!!

Date: Fri, 25 Feb 94 10:48:45 EST
From: "John F. Woods" <jfw@ksr.com>

Charles Adams reports:

> i got an application from a QRP ARCI member for the WAS (Worked
> All States) award. nothing unusual about this until i looked
> at his list!!
> it is
> WAS Single Band 80M Single Mode SSB Single Power 5W Single Frequency
> 3.768MHz

Hah. Don't give it to him. It should have been "Single Watt", too.

:-) :-) :-) :~)

From qrp-admin@Think.COM Mon Feb 28 08:44:12 1994
Date: Mon, 28 Feb 1994 08:42:32 -0500
From: Brad Mitchell <bmitchel@CBA.Kodak.COM>
Subject: wb8ygg.gif description

In case any of you down load the .gif file from think.com wb8ygg.gif,
here is a description of what is in that picture. Again thanks to N2VTK, John
for the digital pictures!

FYI,

In the wb8ygg.gif, that is on think.com, are the following:

The big blue thing on the left is a 30 meter Ramsey qrp tx
The Black box in front of the QSL is an 80 meter Spider transceiver
The Black box behind the QSL is my 20 meter NN1G rig.
Under that RIG hidden by the QSL is my 40 meter NN1G rig
The green rig on top of the black box is an 80 meter Qubic Incher
(I've misspelled Qubic so many times, I'm doing it on purpose now)
The other Green rig is a 80 meter Sudden Rx
The Red thing is a 40 meter Spider transceiver
The small blue box is a 30 meter Sudden Rx.
The board in the front of the picture is the 73 version of the
Colorburst transmitter , changed over for 40 meters. (1.5 w)
The larger board is a 30 meter Spider.

All the rigs have homemade circuit boards, or ugly.. (Qubic incher)
The table on the right has some of Paul, K2DB's things,
and the things to the left of the big blue Ramsey rig are Jim, N2VNO's
homemade stuff.

73 all

Brad WB8YGG

From qrp-admin@Think.COM Fri Mar 4 16:28:38 1994
From: mvjf@mvubr.att.com
Date: Fri, 4 Mar 94 16:17 EST
Subject: Where ?

9V Daniel,
What is your call, and where are you ?

W1FMR

From qrp-admin@Think.COM Tue Feb 22 13:35:07 1994
Date: Tue, 22 Feb 94 11:34:50 MST
From: kub@upl.com (Steve Kubisch)
Subject: Where is MY NorCal-40

Hi,
Well, reading the mail on those of you who have your NC40's built and working and those of you who have recently recieved yours from the NEW second batch has me jelous! Where is MINE?? I guess I just have to be patient. Would have been great to have this weekend as the contest stations from Japan and the South Pacific (ZL,VK,etc.) were booming in Saturday night. I worked them, but with my TS850 turned down to 5W, not really the same. No testers on 30, and not many stations at all to work on the Backpacker. I suppose everyone was chasing the great DX in the contest.

So I guess I'll keep hurrying home to check the mail box. There is a bright side, if I'm building it when I have the mods in the March QRPp I can include some of them. Can't wait73

Steve WW7Y

From qrp-admin@Think.COM Sat Mar 5 05:50:12 1994
Date: Sat, 05 Mar 94 10:39:11 GMT
From: dick@kanga.demon.co.uk (Dick G0BPS)
Subject: WQF in EU

Hi Gang..
As Jim mentioned, Gus G8PG is heavy into this but generally there is not a huge following. Perhaps we should get together and get it off the ground a litte more. I just love the sound of "IWQF"...

page 20 - back cover with 1/2 for mailing info and 2meter qrp net notice

Page 2. SILENT KEY. Wes Farnsworth, KE0NH, a Denver area amateur and CQC charter member #27, became a silent key on Feb 8, 1994 after a long illness. He will be missed by his many ham friends.

Overall notes: (Opinions of Chuck Adams K5F0)

1. Pretty good quality
2. Larger print size than the QRPP, kinda reminds me of the M-QRP T5W.
3. Heavy duty cover like the QRPP, stapled shut for mailing.
4. Obviously, well maybe nearly obvious, is that articles are printed across a complete sheet, thus the reason for the large number of pages between continuation. Somewhat of a minor irritation in reading, 'cuz you gotta skip back and forth while reading.

Articles due to the editor by the 15th of Feb, Apr, Jun, Aug, Oct and Dec. Rich High, W0HEP, president and editor, want them on 3.5" disk in Mac or MS-DOS format using Ami Pro, Word, MS Works, WordPerfect, and some others. Graphics scanned photos in TIFF format.

I get the impression this baby going to be published 6 times a year, thus the smaller format or they are gonna go broke. :-)

Dues are \$10.per calendar year or \$1.00 per month after March.
Colorado QRP Club 14261 E. 4th Avenue #161 Aurora, CO 80011-8711

OK - here's the form (approximately spaced)

MEMBERSHIP APPLICATION

Call:_____ Class:_____ Exp.date:_____

Name:

Address:

City: State: Zip:

Phone: Home Work(opt)

Fax/Mailbox/etc.

Member: ARRL MiQRP ARCI NWQRP GQRP Other QRP

Occupation:

QRP: Active____ Inactive_____ New to QRP _____
Interested in QRP_____
QRP equipment:
Bands operated:
Do you operate 2 meter FM?_____

(QRP Net every Monday evening at 8:00 pm on 147.225
repeater covering the eastern slope from Cheyenne to Colorado
Springs via link on 145.160. Simplex: 146:445)

Interests: Technical__ Operating___ DX_____
Contests_____ Construction_____ Portable_____
Movable_____ QRPp_____ VHF/UHF_____
Digital Modes_____ Antennas_____
Other_____

Signature/Call_____ Date_____

Dues: \$10 per year

Send to 14261 E. 4th Avenue #161, Aurora, CO 80011-8711

So another place to put your hard earned bucks. Is this stuff
tax deductible? NOT. :-)

oh. 80Meters: Call "CQ CQC" on 3.710 c.w. daily 8:00 pm Mountain time.
(which i figure to be 0300Z - which i think everybody should use)
:-)

OK, we now return you back to net control- QNX

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Thu Feb 24 22:53:22 1994
Date: Thu, 24 Feb 94 19:53:02 -0800
From: adams@chuck.dallas.sgi.com (Charles Adams)
Subject: YAP - Yet Another Publication

February 24, 1994 de k5fo

Question: What do the following months have in common?

Jan, Mar, Apr, Jun, Jul, Sept, Oct, Dec.

Answer: They are months in which you receive either the QRP-ARCI Quarterly (QQ) or the Northern California Club's newsletter the QRPP.

Question: What is missing?

Feb, May, August, Nov.

So, as a public service, Chuck Adams, K5FO, will be providing a newsletter - appropriately called 'The K5FO Newsletter' until something more appropriate can be found. Hopefully, this will take place in short order. The North Texas QRP Club, as noted in World Radio, will now start issuing membership numbers. So, boys and girls listen up.

In order to get your copies of the newsletter and to get your number, do the following:

1. Send letter with your name, call(if any), address, email address if you are on the super highway of information, and any other info you want in a membership book to

Twilight Publishing Company
1301 West Highway 407, Suite 353
Lewisville, TX 75067

2. Enclose on photograph of A. Lincoln (\$5 bill) produced by the US Govt. and a postcard with your name and address to acknowledge receipt of same. I tend to hold on to checks too long. MO is you don't trust the USPS. :-)

This will get the first issue in May. We plan to do the same as what the QRPP is doing. Hopefully, 60 pages, but don't hold us to that on the first issue and I will purchase the bagger and

stapler to produce the same size and format as the QRPP. Thus all your issues from either group or both will fit side by side in your book case and become collector's items. NOTE: there will be no reprints or second editions. One and one time only will these be produced. Doug chose yellow, so I guess K5FO will have blue or something similar.

The money will be put in a separate account in a financial institution and will go solely for the production of the newsletter.

So, you can contribute. We are looking for skilled writers. We want unique articles. We don't want to compete with the QRPP and QQ and we don't want to fight for articles. Contribute to both or all, but try not to duplicate information. We have enough for everybody.

Here is the tentative outline for V1NR1:

1. Principle of Reciprocity Applied to QRP Signals
2. Toroids - Mystery and Mastery
3. University - Part 1 of N, where N is large (the stuff from Chuck's series using the ARRL Handbook and Solid State Design)
4. Adams/Phillips Code (abbreviations for CW work)
5. CW Operation
6. DXCC Goals - How to rack up the country count using QRP
7. Internet QRP Group
8. Sunspots for 1784 to present & Propagation
9. Mobile CW Operation - QRP and QRO to 50W
10. QRP ARCI Awards Program
11. QRZ! Ham Radio CDRom Review

And a multitude of guest contributions. Now is your chance to get in on the ground floor of YAP - Yet Another Publication.

Let us know what you want. Let Doug Hendricks, Editor and Publisher of QRPP, know what you want. He and I are friends and will coordinate so that we don't get in each other's way.

You realize, of course, that Doug set high standards for the printing business of local club newsletters. It's certainly not for the faint of heart. :-) ;-)

Send your contributions to adams@sgi.com or mail them to the above address. Prefer ASCII format on MSDOS disk if not emailed. From the desk of Chuck Adams, K5FO

dit dit

Chuck Adams K5FO CP-60
adams@sgi.com

From qrp-admin@Think.COM Thu Feb 24 00:32:29 1994
Date: Wed, 23 Feb 94 19:32:17 HST
From: Jeff Herman <jherman@uhunix.uhcc.Hawaii.Edu>
Subject: [ASIRENE@v9001.ntu.ac.sg: sockets and connectors]

Years ago I wrote to Heath and asked them why they used RCA connectors rather than the usual coax connectors; never received a reply...

The S0-239 socket mates with the PL-259 plug.

73,
Jeff

=====

Jeffrey Herman, NH6IL, jherman@hawaii.edu, who, in his spare time, cannibalizes old TV sets to make QRPp transmitters (CW of course).

Previously: WA6QIJ, WH6AEQ, NMO (U.S. Coast Guard Radio Honolulu: 500kc CW)
NMC6 (U.S. Coast Guard Group Monterey)

It is said that CW is the second most popular mode on HF, but scanning the bands I frequently count more CW QSOs than SSB QSOs.

=====

Received: by mail.think.com; Wed, 23 Feb 94 23:19:16 -0500
Received: from Think.COM by mail.think.com; Wed, 23 Feb 94 23:19:10 -0500
Received: from v9000.ntu.ac.sg by Early-Bird.Think.COM; Wed, 23 Feb 94 23:18:46 EST
Received: from NTUVAX.NTU.AC.SG by NTUVAX.NTU.AC.SG (PMDF #2532) id <01H99HRVU3RK9ZLQLV@NTUVAX.NTU.AC.SG>; Thu, 24 Feb 1994 12:16:03 SST
Date: 24 Feb 1994 12:16:03 +0700 (SST)
From: ASIRENE@v9001.ntu.ac.sg
Subject: sockets and connectors
To: qrp@Think.COM
Message-Id: <01H99HRVU3RM9ZLQLV@NTUVAX.NTU.AC.SG>
X-Vms-To: IN%"qrp@think.com"
Mime-Version: 1.0
Content-Type: TEXT/PLAIN; CHARSET=US-ASCII
Content-Transfer-Encoding: 7BIT
Sender: qrp-admin@Think.COM

Precedence: bulk

Hi,

I've noticed a number of homebrew txrx using RCA connectors. Do these incur loss? If not, why is the PL-259 more popular (expensive too)?

Also, does anyone know what a S0-239 socket looks like? Is it a version of BNC or the S0-259?

73 de 9V Daniel